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OIL PROFITS

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The Oil Industry presents today a more orderly picture than ever before. Able management has effected important re-adjustments, increased efficiency has placed operations on a profitable basis. Values are more sound. Judgments are keener. Both crude and refined markets evidence a more stable condition.

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Industry Is Uncertain as to What Effect Increase in East Texas Allowable Will Have on Price

By ANDREW M. ROWLEY

OF especial interest to the industry at this time is what effect increasing the allowable production in East Texas will have on conditions in that area and on the crude oil and gasoline price structures not only in East Texas but in other competitive territories. Many profess to believe there will not be any reduction in crude oil prices at this time or in the near future and they point hopefully to reductions ordered by the Texas Railroad Commission in other fields, saying such reductions will offset the increase in East Texas.

Oil men certainly have had enough experience with price changes to realize the quantity of crude oil involved is not always the most important factor causing a change in price. A quantity of crude, relatively small in proportion to the total production involved, may result in lower prices if that small quantity, moving to market under the regularly posted price, is manufactured into gasoline which, in turn, is sold at cut prices in competition with gasoline made from higher priced crude. That is the condition many fear will obtain as a result of the increase in allowable in East Texas and the decision of many major buyers to purchase only 43 bbls. per well per day, or 7 bbls. per well per day less than the allowable production.

The situation in East Texas is bad. No one will be helped by trying to gloss over actualities. A large majority of landowners and producers are in favor of retaining the old allowable of 43 bbls. per well per day. Just why this allowable was increased never has been made entirely clear. It looks like another case of the tail wagging the dog. There is no question the landowner and the producer endeavoring to obtain the greatest maximum recovery from his well at the best price possible will suffer most from this new order. It is doubtful if the present crude price in East Texas can be held. Much depends on what producers do about the extra 7 bbls. per well per day. If this crude moves to market at cut prices, there is but little doubt that cut price will be made the posted price for all the crude. Lower prices will be a backward step which can be avoided if producers and refiners hold their output to market demands.

Crude Oil Production in the United States

Estimated daily average production for the week ending September 3, and a comparison with previous week and one year ago, follows:

Oklahoma—	Sept. 3	Aug. 27	Sept. 5, 1931
Oklahoma City	67,230	70,630	9,310
Seminole-St. Louis	110,420	110,215	50,720
Remainder of State	205,170	205,870	196,205
Total Oklahoma	382,820	386,715	256,235
East Texas—			
Lathrop	127,625	125,936	(*)
Kilgore	99,843	98,317	(*)
Joiner	104,417	103,463	(*)
Total East Texas	331,885	327,716	
West Texas	172,534	172,758	205,553
North Central Texas	74,467	74,495	75,657
Texas Panhandle	53,595	53,671	61,271
East Central Texas	56,489	56,783	53,325
Gulf Coast Texas	118,025	119,144	118,470
Southwest Texas	58,127	58,186	63,985
Total State of Texas	865,122	862,753	578,261
Kansas	96,315	95,220	98,515
North Louisiana	29,720	29,285	29,785
Gulf Coast Louisiana	31,125	32,278	27,430
Arkansas	33,585	34,120	37,890
Eastern fields	112,000	112,000	109,000
Rocky Mountain area	75,817	75,456	93,891
California—			
Santa Fe Springs	60,000	59,000	61,750
Long Beach	70,250	70,000	77,500
Playa Del Rey	14,750	14,750	21,150
Elwood	14,000	13,750	26,250
Kettleman Hills	62,500	59,750	62,250
Remainder of State	255,500	254,750	256,100
Total California	477,000	472,000	505,000
Total United States	2,103,504	2,099,827	1,736,007

*Fields shut down.

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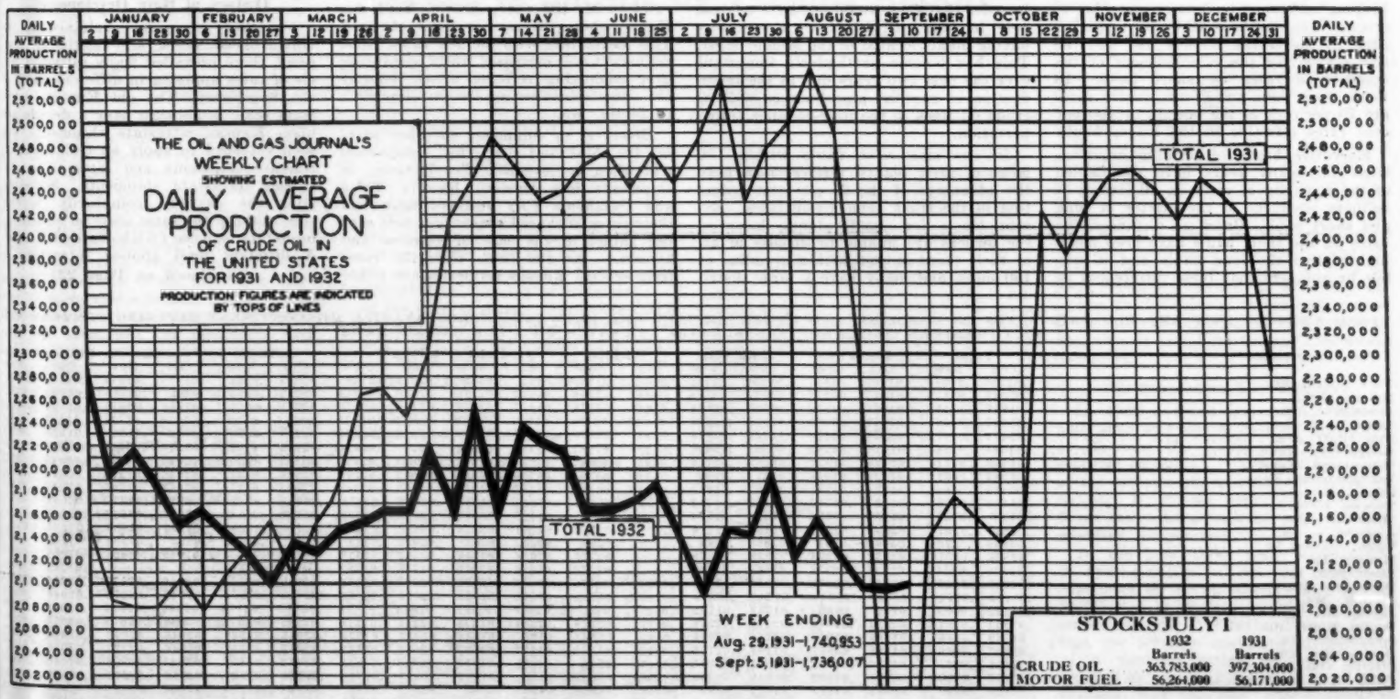


Lowering Rail Rates to Meet Truck Competition Is Highly Important in Refinery Markets

By C. O. WILLSON

Refiners with plants in the Mid-Continent area and jobbers with the distribution in the same section are beginning to realize the full significance of the new freight rate schedules on refinery products which became effective early last month. As a result of these schedules there has been considerable shifting in outlets for refineries and sources of supply for the jobbers and it is apparent that additional changes will be made later.

Refiners who had substantial outlets in a certain section of the Mid-Continent have had the choice of absorbing from one-eighth to three-fourths cent freight rate advantage in excess of what previously prevailed or turning their accounts over to competitors more advantageously located since the new rates became effective. Complaints as well as approval of the lower rates have been voiced by both buyers and sellers. Those who have made a study of the development are interested in its permanent aspects and its probable reflection in other sections of the country where similar conditions exist.

The new and old rates between representative refining centers and consuming states in southwestern states are shown in the accompanying table. It will be noted that the new rates have brought both advances and decreases with some refining centers obviously benefiting more than others in the matter of lower schedules. The changes have been brought about both as a result of a general investigation of rates on petroleum products and also the desire on the part of carriers to compete with trucks in transportation from refineries to distributing facilities. The rate changes based on the general investigations take into consideration all phases of the rail situation with adequate revenue to the carriers a dominating factor in the schedules authorized by the Interstate Commerce Commission. In the matter of truck competition, however, the factor of keeping additional business from going to trucks with the possibility of regaining some of the traffic already lost was the sole reason for the establishment of the competitive rates on short hauls. In most cases these truck competitive rates are 75 per cent of the normal or 100 per cent rates effective in the longer hauls.

Executive heads of refining organizations for many years have complained of the disparity of rates on all classes of refinery products in the matter of long and short hauls. Based on distances, the rates on the short hauls have been much higher than the long hauls and it was felt by shippers that these differences in rates were largely arbitrary and not based on relative costs in handling the traffic.

Little headway was made in bringing about changes in these short haul rates until the past year. With the advent of improved roads and better truck facilities refiners and bulk terminal operators have found that they could save money by trucking gasoline and other products for the short hauls. The volume of this business has increased rapidly over the past two years and distances have been widened to the point that movements up to 300 miles are regularly made from a large number of refineries. With their profitable short-haul business at stake, carriers operating in some of the shipping centers of the Middle West have found it expedient to do what they formerly contended was impossible, and they have established lower schedules with the hope that it will recover or at least check the truck movement.

Truck Competitive Rates

As explained more in detail later, the truck competitive rates now in effect in a large area of the Southwest provided 25 per cent reductions on shipments up to 150 miles with smaller reductions in effect in certain intrastate and interstate reductions up to 250 miles. It is assumed that these rates will be made effective on all intrastate and interstate shipments within the area concerned and it also is believed that similar rate structures will be made effective in other refining and distributing sections where truck hauling of petroleum products has become an important competitor of the railroads.

The application of the lower rates in the Mid-Continent has brought special problems not found in any other section. There are now over 100 operating refineries within the States of Kansas, Oklahoma, North Louisiana, Arkansas and inland Texas. Most of the operators have centered their sales efforts on securing outlets as near their plants as possible in order that they would not have to compete in long rail hauls with operators having plants located in the Middle West. This has become particularly important over the past two years due to the introduction of gasoline pipe lines as well as crude oil lines in the long-distance transportation.

In the matter of hauls within 150 miles of their plants, refiners now have the advantage of the 25 per cent reduction in the truck competition rates. Except for a few small plants, however, the owners are unable to dispose of all of their plant output within a radius of 150 miles and many have a large distribution within a radius of 150 to 500 miles.

Emphasize Local Markets

The situation which has been developed is this. The refiners are profiting by the lower rates in shipments a short distance from their plants in cases where they are using the rail hauls. Many refiners have truck systems to handle their short-haul business, and with the investment already made they will continue to haul by trucks at least until the trucks are worn out. In this connection, some refiners state that despite the lower freight rates the advantage still lies with the trucks in sections served with improved roads. As soon as the refiner gets out of the short-haul territory he is now coming in competition with refiners who can serve that territory with short hauls from their plants. In other words, within the Mid-Continent there are so many widely scattered plants that a large part of the territory can be served by short hauls from one or more of the refineries. Thus the new rates in effect mean that unless individual refiners change their marketing territory they will lose in the long hauls all that they gain in the short hauls. There are, of course, exceptions to this rule in which individual refiners gain more than they lose with the new rates, but for the Mid-Continent area as a whole many observers feel that it will prove more of a benefit to consumers than to the refining industry.

Representative Situation

Two or three cases taken from the accompanying table will illustrate this point. Several refiners in Oklahoma, Kansas and Arkansas ship gasoline and other refined oils to Fort Smith, Ark. With the new schedules the rate from Tulsa to that point on gasoline is 1.056 cents per gallon, which compares with the former rate of 1.254 cents per gallon.

The new rates from all the other remaining refining points listed in the table to Fort Smith are higher than the old rates, with the exception of Neodesha, Kans., where the rate was not changed. This means that with the new rates Tulsa refiners have increased their advantage over competing refining areas. Largely the same situation applies in shipments to Joplin, Mo.

However, in shipments to other parts of the Mid-Continent this comparison will often be reversed. For instance, in shipments into western Kansas, Tulsa and Oklahoma City refiners have had their rates advanced almost one-half cent per gallon in the case of gasoline and kerosene. At the same time the rates from several Kansas refineries are either lower or have not been changed. Thus, if Tulsa and Oklahoma City refiners continue to ship to western Kansas they must absorb a large freight rate disadvantage. The same comparisons will be found at many other points in the Mid Continent.

Increase Trading

In these days of low prices for gasoline with narrow profits, if any, for refinery operators, an increase in the advantage of one refiner over another varying from one-eighth to three-fourths cent per gallon in the delivered price of gasoline and other products cannot be overlooked. Due to this fact, market students state that it will inevitably tend to localize marketing, resulting in increased trading and inter-refinery buying.

Over the past year there has been a large increase in trading among refiners in order to equalize freight rate advantages. Refiners with their own stations located long distances from their plants are getting their gasoline from other refiners who can serve that territory with relatively short hauls and lower rates. They either buy this gasoline direct or, where feasible, they work out an exchange arrangement and the first refiner furnishes gasoline in its territory for the stations of the second refiner and vice versa. In some cases a three-cornered trade is in effect with three refiners participating. These arrangements will now be particularly attractive within the Mid-Continent.

In the case of refiners who do not have their own distribution the situation obviously is less favorable. One operator points out that his company will be practically forced to use long hauls. In making the long hauls he is compelled to compete with companies who operate largely on a pipe line transportation basis, but this disadvantage, he claims, will be less than in the case of business within the southwestern states.

History of Rate Development

For many years, as explained by the traffic head of a Mid-Continent company, there prevailed many different levels of rates applying in different parts of the Southwest. The old Kansas petroleum scale established over a decade ago upon Kansas intrastate shipments was soon extended to apply on Oklahoma intrastate shipments and later upon Arkansas intrastate shipments. Sometime later the carriers voluntarily applied substantially the same scale on shipments interstate between Oklahoma and Kansas. A different level applied intrastate in

(Continued on Page 22)

TABLE SHOWING NEW AND OLD RAIL RATES ON GASOLINE AND OTHER REFINED OILS BETWEEN REPRESENTATIVE MID-CONTINENT REFINING CENTERS AND SOUTHWESTERN CONSUMING POINTS. RATES ARE GIVEN ON A PER GALLON BASIS

Consuming points—	Tulsa		Ponca City		Okla. City		Wichita		Neodesha		Fort Worth		Amarillo		Shreveport		El Dorado, Ark.	
	Old	New	Old	New	Old	New	Old	New	Old	New	Old	New	Old	New	Old	New	Old	New
Fort Smith, Ark.	.01254	.01056	.01165	.01848	.01254	.01782	.0165	.0198	.0165	.0165	.02013	.0198	.02013	.02211	.01485	.01914	.01485	.0198
Helena, Ark.	.01947	.02178	.01947	.02178	.01947	.02178	.01947	.02178	.01947	.02178	.02046	.02244	.02211	.02541	.0165	.01914	.01353	.0165
Jonesboro, Ark.	.01947	.02178	.01947	.02178	.01947	.02178	.01947	.02178	.01947	.02178	.02211	.02376	.02211	.02541	.01584	.02079	.01353	.01782
Little Rock, Ark.	.01947	.0198	.01947	.02079	.01947	.02178	.01947	.02178	.01947	.02112	.02211	.02178	.02211	.02508	.01419	.01716	.01188	.01056
Pine Bluff, Ark.	.02277	.02178	.02277	.02178	.02277	.02178	.02277	.02376	.02277	.02178	.02046	.02244	.02211	.02541	.0132	.0165	.01121	.00858
Dodge City, Kans.	.01584	.02046	.01419	.01782	.01584	.02046	.01254	.01287	.01485	.01914	.0231	.02574	.02013	.01914	.02211	.03036	.02211	.03168
Hutchinson, Kans.	.01353	.01716	.01188	.01056	.01485	.01716	.00957	.0066	.01254	.01221	.02013	.02376	.01881	.02112	.02046	.02739	.02046	.02772
Independence, Kans.	.01089	.00891	.01122	.01056	.0132	.0165	.01122	.0099	.00726	.00495	.02013	.02178	.02013	.02211	.02046	.02277	.02046	.02310
Salina, Kans.	.01485	.01848	.0132	.01584	.01485	.01914	.01089	.00891	.01353	.01485	.02013	.02508	.02013	.02376	.02046	.02805	.02046	.02838
Topeka, Kans.	.01485	.01782	.0132	.01716	.01485	.01782	.01221	.01221	.01221	.01155	.02013	.02178	.02013	.02211	.02046	.02277	.02046	.02310
Wichita, Kans.	.01221	.01584	.01056	.00792	.01221	.01584	....	....	.01122	.00957	.02013	.02178	.01749	.02112	.02046	.02277	.02046	.02310
Alexandria, La.	.02838	.02376	.02838	.02376	.02838	.02376	....	.02376	.03267	.02376	.02013	.02178	....	.02508	.01188	.01056	.01221	.01155
Lake Charles, La.	.03069	.02706	.03069	.0264	.03069	.0264	....	.0264	.03267	.0264	.02013	.0231	....	.02772	.0132	.01584	.01452	.01782
Monroe, La.	.02838	.02376	.02838	.02376	.02838	.02376	....	.02376	.03036	.02376	.02013	.02112	....	.02508	.01089	.00891	.01056	.00792
Shreveport, La.	.02838	.02244	.02838	.02376	.02838	.02244	....	.02376	.03036	.02376	.01716	.01782	....	.02508	....	....	.01287	.0099
Bismarck, Mo.	.02211	.02079	.02211	.02079	.02211	.02079	.02211	.02178	.02211	.02178	.02211	.02376	.02211	.02574	.02046	.02079	.02046	.02079
Clinton, Mo.	.01749	.01716	.01749	.01914	.01749	.02079	.0165	.01782	.01518	.01518	.02013	.02376	.02013	.02574	.02046	.02079	.02046	.02079
Joplin, Mo.	.01122	.0099	.0132	.0165	.01353	.01782	.01254	.0165	.01089	.00792	.02013	.02178	.02013	.02178	.02046	.02079	.02046	.02079
Poplar Bluff, Mo.	.02211	.02079	.02211	.02079	.02211	.02079	.02211	.02178	.02211	.02178	.02211	.02376	.02211	.02574	.02046	.02079	.02046	.02079
Springfield, Mo.	.01749	.0165	.01749	.01914	.01749	.02046	.0165	.01848	.0165	.01518	.02013	.02376	.02013	.02541	.02046	.02079	.02046	.02079
Bartlesville, Okla.	.00957	.0066	.01188	.00957	.01188	.01155	.0132	.01089	.01122	.00693	.02013	.02112	.02013	.02211	.02046	.02277	.02046	.0231
Clinton, Okla.	.01353	.01617	.01254	.01221	.01089	.00891	.01419	.0165	.01485	.01914	.02013	.01848	.01452	.0165	.02046	.02508	.02046	.0264
Enid, Okla.	.01122	.01056	.0099	.00693	.01089	.00858	.01089	.00891	.0132	.01584	.02013	.01914	.01683	.01914	.02046	.02277	.02046	.0231
McAlester, Okla.	.01122	.0099	.01353	.01617	.01023	.0099	.01485	.01914	.01353	.0165	.02013	.0165	.01848	.02211	.02046	.0198	.02046	.02112
Oklahoma City, Okla.	.01122	.0099	.01089	.00891	....	....	.01221	.01584	.01353	.01716	.02013	.01716	.01683	.01914	.02046	.02244	.02046	.0231

Canadian Government Investigating Motor Fuel Possibilities of the Tar Sands of Alberta

By VICTOR LAURISTON
Staff Correspondent, Canadian Fields

CHATHAM, Ontario, Sept. 3. — Canada's position in relation to crude oil supply is peculiar. With a well developed and steadily growing refining industry, the country is dependent for crude oil supply almost wholly upon imports. Even when the Turner Valley Field was at the peak of production, the native crude supply was only a small fraction of Canadian refinery requirements.

At the present time, with plentiful supplies of cheap imported crudes from the United States, Peru, Colombia and Venesuela, the situation is not a serious one; but in anticipation of future crude shortage and higher prices, attention is being given, not merely to the possibility of developing oil fields in Canada, but to the potential recovery of petroleum products from the immense "tar sand" deposits of northern Alberta.

These deposits, known for many years, are vast in extent, and consist of a species of sandstone impregnated with asphaltic oil. The deposits outcrop along the Athabaska River and cover a large and undetermined area. Early efforts nearly 20 years ago to recover free oil by drilling proved unsuccessful. Later, experiments have been carried on, first with the object of separating the crude from the bituminous sand, and later for the separation of the bitumen as possible paving material.

While the aggregate amount of crude in the deposits is enormous, the cost is prohibitive in the face of low prices for free oil. More recent experimental work by the federal mines department at Ottawa has been devoted to determining the possibilities of increasing motor fuel recovery from the tar sands by utilizing hydrogenation and pressure-cracking processes. A recent report reviews the work in part as follows:

Work Done to This Time

"Prior to 1929 investigational work in Canada on bitumen from the bituminous sands of Alberta was concerned with its use as a road-paving material and its amenability to refining into petroleum products by ordinary fire-still and pressure-cracking processes, the results thus obtained being compared with other results arising from crude petroleum and asphalt materials. Since that date, however, considerable attention has been paid to the value of this bitumen for hydrogenation treatment as compared with coal, coal tar and petroleum residues.

"Considerable pioneer work has been carried out by S. C. Ells of the mines branch concerning its value for road and other similar purposes and methods for the economic separation of the bitumen, and this has been continued up to the present. Research work of a similar nature, but with special reference to the separation of the bitumen from the sands, and its comparative value for refining into petroleum products, has been conducted during the last decade by Dr. K. C. Clark of the research council of Alberta."

The Division of Fuels and Fuel Testing at Ottawa has worked on laboratory methods for assaying both the raw bituminous sands and the extracted bitumen; while pressure-cracking tests have also been made. Later, experimental work in hydrogenation was conducted by E. H. Boomer at Edmonton and T. E. Warren at Ottawa.

During 1930 and part of 1931, the Fuel Research Laboratories at Ottawa experimented with high pressure hydrogenation treatment of separated bitumen, and, for purposes of comparison, with ordinary pressure-cracking without the use of hydrogen. In a general discussion of results the report states:

Hydrogenation Experiments

"In his hydrogenation experiments without the use of catalysts, Doctor Warren studied the effect of different variable factors, one at a time, namely: Temperature, pressure and duration of reaction. In brief, the results were that gasoline formation and the tendency to form coke were both increased by higher temperatures and longer times of reaction, and that while the higher pressures decreased coke formation, the gasoline yield and corresponding kerosene yield were independent of pressure — at least within the pressure range used. Other observations were that the amount of hydrogen absorbed, while independent of temperature, increased with both longer duration and higher pressure, and that high pressure and long duration favored the removal of sulphur as hydrogen sulphide, whereas high temperature did not.

"Attention is to be drawn to the method of reporting the results obtained, or rather to the criteria used in expressing the results of the different experiments in respect to the conversion of the raw bitumen into products of lighter specific gravity and higher boiling points. The yields of motor fuel expressed in terms of unrefined gasoline with a boiling point up to 410° F. and of the kerosene fraction are shown, instead of merely indicating the degree of cracking with and without hydrogen, by stating the yield of the total cracked product irrespective of the end products to be derived therefrom, as is the custom in stating the many hydrogenation results found in the literature. It is interesting to note that of the several catalysts experimented with, nickel carbonate proved the most efficient in respect to depressing carbon formation, but this and other catalysts did not greatly increase the yield of gasoline in comparison with experiments under similar conditions without the use of catalysts.

Pressure Cracking

"Slightly higher yields of unrefined gasoline were obtained by pressure cracking than by the batch hydrogenation treatment, but the refining loss may be expected to be greater. Ordinary cracking also produced more coke. In comparison with a possible yield of 30 to 40 per cent by weight of gasoline by recycling in ordinary cracking processes without the use of hydrogen, yields of 65 to 75 per cent by weight, equal to 90 to 100 per cent by volume, are considered possible by continuous recycling hydrogenation treatment. Work on a larger scale, together with a more intensive study of the economics of the situation, is advisable and necessary before attempting to form an opinion regarding which process—hydrogenation or pressure cracking without hydrogen—is the more suitable for treating Alberta bitumen for the production of motor fuels."

The tests reported by T. E. Warren were carried on with two samples, one raw separated bitumen dehydrated after reaching Ottawa and the other dehydrated before shipment. The distillation yields of 3.5 and 2.8 per cent showed that any treatment to produce gasoline in commercial quantities could not be based on the separation of the small amount already existing in the bitumen, but must produce it by molecular change. The division of the large molecules of which the semisolid bitumen is composed into the smaller ones which make up gasoline may be accomplished by heat treatment, or cracking.

A large proportion of the bitumen has such a low volatility that the temperature at which cracking begins, about 350° C., is lower than the boiling point. Consequently, when it is distilled at atmospheric pressure, part of the vapor is the product of cracking taking place in the liquid phase. Therefore one method of cracking the bitumen is to distil it at atmospheric pressure from an externally heated iron still such as the so-called "fire still" used in refining.

Seven hours of distillation in an electrically heated iron still produced the following results with the two samples:

	Weight	Per cent
Sample No.	3,355	7,295
Charge of bitumen	100	100
Coke residue obtained	26.8	27.7
Liquid product obtained	61.6	56.9
Gas and loss	11.6	15.4
Gasoline	12.1	12.9

In 1926 samples of bitumen were tested by the Universal Oil Products laboratory according to the Dubbs process. The bitumen was charged to the cracking apparatus without preliminary treatment and heated at 750° F. under 90 pounds pressure. The yield of gasoline was 27 per cent by weight, with coke residue of 28 per cent; the gasoline having a good knock rating; benzol equivalent 33.2.

In tests of the Cross process at the Kansas City testing laboratory the bitumen was distilled to coke in a fire still and the distillate cracked in small scale equipment. The yield of unrefined gasoline was 20.3 per cent, a larger gasoline yield being possible by recycling the higher boiling residue from the cracking apparatus.

Similar experiments at the fuel testing laboratories at Ottawa in 1930 showed, on two different samples, yields of 20.1 to 21.2 per cent of gasoline by weight. Little hard carbon was formed in cracking, but the yield in the preliminary fire still distillation was large. The report adds that the deposit of coke in both cracking processes is a serious objection to their use as it not only wastes a considerable amount of raw material but, also, it is a hindrance to continuous operation.

Hydrogenation Experiments

In 1922 a small quantity of bituminous sand was sent to Bergius' laboratory at Rheinau, the yields being ultimately reported as follows in per cent by weight of the bitumen charged: Motor spirit, up to 392° F., 30 per cent; creosoting oil, 5 per cent; Diesel oil, 25 per cent; unspecified, 15 per cent.

In the past three years experiments in hydrogenation of bitumen have been conducted by E. H. Boomer and A. W. Saddington at the laboratories of the research council of Alberta. It was found that the bitumen contained 15 per cent of a material which was not easily cracked at temperatures as high as 500° C., but that the rest was capable of

Higher Average Initial Output of New Wells Is Shown by August Report

The monthly summary of operations east of California in August included only four weeks' work, while that of July included five weeks. This accounts for the apparent decline in completed work in August. A total of 1,478 wells completed is shown in the August report, while that for July indicated 1,677 completions, a difference of 199 wells. The August oil wells average higher in initial production, as 1,123 wells produced 215,847 bbls. initially, while in July 1,262 new oil wells produced 217,864 bbls. initially. A decline of 69 in dry holes and of 1 in gas wells is indicated by the August statement.

At the close of August there were 2,217 wells drilling, or 110 more than at the close of July, but the number of derricks up, at which drilling had not been started, was 88 fewer in August, indicating a net increase in field operations of 22.

Following are the figures covering all divisions east of California:

SUMMARY OF ALL FIELDS
Wells Completed in August

	Comp.	Prod.	Dry	Gas
Eastern	157	478	15	19
Central Ohio	26	212	8	9
Lima	8	15	2	3
Indiana	16	152	7	4
Michigan	14	5,210	3	2
Kentucky	48	1,765	20	5
Illinois	3	1	1	1
Kansas	44	11,517	12	3
Oklahoma	84	88,905	24	3
North Central Texas	123	5,142	52	5
E. Cent. and E. Tex.	694	43,439	18	0
West Texas	19	3,895	3	0
Texas Panhandle	15	2,512	3	2
Southwest Texas	102	20,931	54	6
Gulf Coast, Texas	52	20,005	17	2
Gulf Coast, La.	12	5,011	6	0
North Louisiana	35	1,331	18	1
Arkansas	2	.....	2	0
Mississippi	6	.....	2	0
Alabama	1	.....	1	0
E. Texas Gas Fields	0	.....	0	0
Montana	8	1,600	4	1
Utah	0	.....	0	0
Wyoming	5	630	1	1
Colorado	0	.....	0	0
New Mexico	4	3,096	1	1
Total August	1,478	215,847	274	71
Total July	1,677	217,864	343	72
Difference	199	2,017	69	1

Rigs and Wells Drilling

	Rigs	Dig.	Ttl.
Eastern	49	164	213
Central Ohio	19	81	100
Lima	1	21	22
Indiana	4	67	71
Michigan	49	69	118
Kentucky	9	58	67
Illinois	1	16	17
Kansas	63	129	192
Oklahoma	129	266	395
North Central Texas	46	171	217
E. Central and E. Texas	181	297	478
West Texas	17	95	112
Texas Panhandle	17	49	66
Southwest Texas	35	134	169
Gulf Coast, Texas	22	113	135
Gulf Coast, Louisiana	1	33	34
North Louisiana	58	108	166
Arkansas	6	30	36
Mississippi	4	12	16
Alabama	1	2	3
East Texas Gas Fields	3	25	28
Montana	10	59	69
Utah	0	17	17
Wyoming	14	79	93
Colorado	9	68	77
New Mexico	7	54	61
Total August	755	2,217	2,972
Total July	843	2,107	2,950
Difference	88	110	22

conversion to oil, gas and coke in proportions which depended on the conditions of the experiment.

The report gives elaborate details of the experiments conducted in the last two years at the fuel testing laboratories at Ottawa. The variables examined were temperature, pressure, time and catalytic action; other conditions being as nearly constant as possible. Temperature variable between 390 and 470° C. showed gasoline yields from 7.9 to 22.6 and of coke from 1 to 31.1; kerosene yield remaining nearly constant at 11 per cent. Sulphur removed decreased with rising temperature.

The duration variable showed between 12 and 90 minutes gasoline recovery ranging from 5.8 to 22.8 per cent; and coke from nil to 23.7 per cent; kerosene yield increasing from 8 to 11 per cent between 12 and 33 minutes and then remaining constant. Sulphur increased also to a maximum of 12 per cent. In the pressure variable gasoline fluctuated from 11.6 to 14.5 per cent, declining as pressure was increased over 1,500 pounds and rising to that point. Coke yield also fluctuated, being highest, 31.5 per cent, at no pressure. Kerosene yield was constant at 11 per cent and sulphur increased.

Summary of Results

Summing up the results, the report says:

"The results of the three series of experiments to determine the effect of varying, in turn, the temperature, duration and pressure on the products obtainable from the bitumen hydrogenated in the absence of catalysts are: First, that coke formation is increased by high temperature, long duration and low pressure; second, that gasoline formation is increased by high temperature and long duration and is independent of pressure; third, that the removal of sulphur as hydrogen sulphide is increased by low temperature, long duration and high pressure; fourth, that the kerosene yield is not influenced by temperature or pressure and only slightly by increasing duration; and fifth, that the amount of hydrogen absorbed is independent of the temperature, increases slightly with increasing duration, and is directly proportional to the pressure. It should be borne in mind that these conclusions are not necessarily valid in ranges other than those studied, or in the presence of catalysts, or in different types of apparatus, although it is probable that they can be applied under conditions which might be used commercially.

"The catalysts studied did not greatly increase the yield of gasoline, nor did they cause the removal of sulphur as hydrogen sulphide. It was found, however, that sulphur can be completely eliminated from the charge by combination with iron oxide or calcium oxide, and that, if preheated with hydrogen, these materials are effective in reducing carbon formation. In the absence of hydrogen pretreatment, iron oxide produced the greatest amount of carbon and nickel carbonate the least, with chromic oxide, zinc oxide, tin, ammonium molbydate and copper oxide showing decreasing carbon formation in the order stated.

"It is to be noted that the refining loss is of a magnitude which makes it one of the most important variables, and that by changing the conditions of the experiment it can be varied greatly. The conditions which reduce the refining loss are also those which eliminate sulphur from the liquid product rather than those which reduce carbon formation."

Commercial Application

Discussing the commercial application of the experiments the report adds: "In commercial hydrogenation plants at present in use, the material to be hydrogenated is heated in a continuous stream of high pressure hydrogen which carries with it the more volatile products formed by the process. The liquid feed is continuously introduced, and the less volatile product containing solid material continuously removed. After the process has been running some time the concentration of each material at any given point in the apparatus reaches a constant value. The conditions of the experiments described in this paper differ fundamentally from commercial practice in that the concentration of the constituents of both gas and liquid are always changing. While this procedure has obvious faults, it possesses the advantages that the duration is known, and the effect of the pressure variable on hydrogenation can be studied without taking into account its effect on the distillation of the product. Complete data on ultimate yields can be obtained only in a continuous apparatus.

"Considering only the experiments herewith reported, certain observations concerning the hydrogenation of Alberta bitumen are to be made, namely, the bitumen in question can be hydrogenated without the formation of solid carbon to give a crude oil yield of 95.4 per cent by volume (90.5 per cent by weight) of the charge, the yield of unrefined gasoline being 24.9 per cent by volume (18.2 per cent by weight) of the original bitumen; catalysts which can be used to give the results just mentioned are ferric oxide or calcium oxide pretreated with hydrogen at 2,500 pounds per square inch pressure and 330° C. for two hours; the duration of the actual bitumen hydrogenation test, neglecting heating and cooling periods, is 30 minutes, the temperature 410° C. and the initial pressure 1,470 pounds per square inch; sulphur, which has been shown to be an important factor in the refining loss, can be completely removed by ferric oxide or calcium oxide under hydrogenating conditions.

"As shown by Boomer and Saddington, the residual oil after the removal of the gasoline product can be hydrogenated in the same way as the original bitumen, although a small portion, 15 per cent, is resistant to thermal treatment below 500° C.

"It is reported that refined gasoline can be produced from coal at a total cost of 14 cents per gallon, of which 4 per cent represents the cost of the coal. On the assumption that bitumen is more amenable to hydrogenation than coal, and that the difference in price between bitumen and coal is not too great, there is a possibility that gasoline can be produced from Alberta bitumen at a price lower than that stated above. Such a prediction, however, is subject to confirmation by larger scale tests and by a complete study of the economics of the situation."

In reference to the comparative values of the two processes, the following conclusions are drawn:

"1. The results of small scale cracking experiments reported by the Kansas City testing laboratory have been verified experimentally. Slightly larger yields of unrefined gasoline can be obtained by the cracking process than by a batch hydrogenation process in which no coke is produced.

"2. The advantage of the cracking process is offset by the fact that much of the charging stock is degraded to coke. The ultimate yield of unrefined gasoline, on recycling through the cracking process, would probably be 40 to 50 per cent by volume (30 to 40 per cent by weight) while by recycling through the hydrogenation process the ultimate yields would probably be 90 to 100 per cent by volume (65 to 75 per cent by weight). Furthermore, the refining loss is much smaller in hydrogenation than in cracking.

"3. While there is a balance in favor of hydrogenation from a technical point of view, the fixed charges on equipment are higher than in cracking, due to the higher pressures, the additional apparatus necessary for the production of hydrogen, and the slower passage of material through apparatus of given volume. The cost of raw material for the production of hydrogen is another charge absent in cracking. It is impossible to conclude at present which type of process would be better for the treatment of Alberta bitumen, or if either is commercially possible."

Teagle Temporarily Retires From Oil Industry to Direct National Employment Campaign

By A. E. MOCKLER
New York Bureau, The Oil and Gas Journal

NEW YORK, Sept. 3.—Walter C. Teagle, president of the Standard Oil Co. (New Jersey), and recently appointed to head the "share-the-work" movement endorsed by President Hoover's Economic Conference, has taken a leave of absence temporarily from the oil industry, and will devote his entire time and energy to the re-employment campaign. Mr. Teagle has established headquarters in the Federal Reserve Bank Building here, and with his vice chairman, L. C. Walker, president of the Shaw Walker Co., is getting his campaign under way. While no definite goal has been set, it is understood that Mr. Teagle's group hopes to restore between 1,000,000 and 2,000,000 unemployed persons to pay rolls.

Outlining his plans for the employment drive, Mr. Teagle says: "The purpose of this endeavor is to spread the available jobs among as many workers as possible. There is less work to be done today than there was before the depression hit us, but there are at least as many men and women available to do it. If every worker now employed on practically full time were to work fewer hours a week, this same volume of work could be made to give employment to a greater number. It is the purpose of the co-ordination committee to aid the committees in each of the Federal Reserve districts to effect such wider spread of work by employes in all sections of the country. We are not an employment agency.

Co-operation Necessary

"Successful operation of the job-sharing idea implies the complete co-operation of all hands, from the highest executive to the lowest worker. It is not a fantastic idea, because it has been successfully tried out in many industries. In its campaign for work for the unemployed, the American Legion advocated the shorter work week. The American Federation of Labor has endorsed job sharing. Mr. Walker put it into successful operation in his own plant, and brought about its general acceptance by employers so that now 47 separate companies in Muskegon, Mich., are working under this plan.

"After a thorough canvass of the necessities and a study of the remedies already attempted, the banking and industrial committee of the Pacific Coast Reserve district concluded that the first requisite to recovery was to get people jobs, and that the way to accomplish this lay through job sharing in every line of activity. The whole-hearted acceptance of the plan on the Pacific Coast

WALTER C. TEAGLE

was so marked as to impress the Washington conference with the advantage of extending the plan throughout the entire United States.

"There is a general feeling that the depression is on its way out. Yet we cannot have prosperity with some 10,000,000 people out of work. Improvement cannot go far until these men begin to move back into jobs. Once they begin to move back to work, however, the employment situation will cease to be a drag and become, instead, a spur to the return of prosperity.

"As business improves, if employers will handle the increased work by taking on more employes rather than by working their present forces longer hours, it will mean a substantial reduction in the number out of work. But of more importance is a general acceptance of job sharing on the part of all. No employer or employe on approximately full time should feel himself immune from participation in the general program. The plan has been accepted and successfully operated by more than 3,000 industrial organizations. It should be just as readily accepted by retail and wholesale establishments in all lines, offices, banks, public utilities, all forms of service activity and in every business, indeed, that has more than one or two employes. In this way, we can create jobs for workers now idle."

"Staggered Work" Plan

Mr. Teagle stressed the fact that the committee's plan (which has been for some time past operative in the Standard Oil of New Jersey organization) does not suggest a five-day week, a seven-hour day, or any other specific reduction in working hours or times as a means of creating more employment. Each industry and business, he said, will be asked to adopt the principle of "staggered work," but no attempt will be made to impose specific rules as to how this is to be done. Replying to a question as to whether his committee was endeavoring to promote a permanently shorter work week, Mr. Teagle said: "This is an emergency measure. When we have another era of prosperity it may be advisable to have longer working hours again."

Staggered work can be made effective in almost every line of industry, Mr. Teagle added, although the strongest opposition to the plan is expected to be in the form of inertia on the part of employers unwilling to "try anything new." Standard Oil Co. of New Jersey, he said, has 33,000 employes on its rolls, but if it had not staggered work some months ago, its working force would not now exceed 30,000. The principal industry in which the plan is expected to prove ineffective, he said, is in the railroad field. The task of readjusting working time of railroad crews, because of the seniority rules of the railroad brotherhoods, appears "almost insurmountable," he said.

Mid-Continent Refinery Operations Show Small Increase in September Compared to August

By W. T. ZIEGENHAIN

Refiners in the Mid-Continent area will run approximately the same volume of crude daily in September as August. The increase shown in the schedules of the refineries in East Texas and North Central Texas are practically equalized by the lesser runs scheduled for the plants in Oklahoma, West Texas, Kansas, North Louisiana and Arkansas. The September total is shown as 430,430 bbls. compared with 427,710 bbls. in August.

This increase in the runs for the area may be accounted for principally as the result of increasing the allowable production of the East Texas Field as most of the increased refining activities are in those plants receiving this crude.

In the past three months some refineries in the East Texas Field found it difficult to get all of the crude desired. However, the complaints were generally accompanied by the statement that the oil would have to be offered below the posted price. So, while the refined oil market was not in shape to absorb more gasoline, nor refinery operations very profitable with crude at the present posted price, the only cause for increasing these runs would be that refiners produce their own oil at a profit and at 98 cents a barrel, this can be done in East Texas.

Start Up Plants

There is a tendency toward starting up idle plants as shown by the resumption of operations in the Atlantic Pacific and Gulf Refining Co. plant at Wichita and the Archer Refining Co. at Megargel. In the past year the trend has been in the opposite direction and each month brought additions to the list of shut down refineries. This movement was most pronounced in the North Texas area and it is significant that the above plants resumed operations within this area.

Oklahoma

Oklahoma refineries will run 147,850 bbls. of crude per day during September compared with 151,050 bbls. in August. This decrease, while small, shows the determined efforts being made by this group of refiners to hold production near demand.

Some time within the last half of the month, the Associated Petroleum Corp. will start up the 5,000-bbl. skimming and cracking plant at Allen, which it has leased. Minor repairs are necessary as the plant has been shut down over the greater part of this year. The announcement of the Associated Petroleum Corp. taking over this plant was made several weeks ago and named Victor Smith president and John B. Foster vice president. Mr. Foster is affiliated with companies producing oil in the Oklahoma City and Seminole Fields and arrangements have been made with the Independent Pipe Line Co. to move the Oklahoma City oil to Seminole where it will be picked up by the Associated Petroleum Corp.'s line to be delivered to the refinery.

The new 2,000-bbl. reforming unit at the Ponca City refinery of the Empire Oil & Refining Co. has been completed and has been placed on stream. Work was also started preliminary to the construction of a vapor recovery and stabilizer for the same plant. Construction work is also in progress on the 1,600-bbl. asphalt vacuum flashing unit at the Cyril plant of the Anderson-Prichard Oil Corp. and is expected to be in operation by the middle of November.

Kansas

Kansas refinery operations remain practically unchanged. New construction work features this area as plans were announced a week ago for the modernization of the Argentine plant of the Sinclair Refining Co. in addition to the building of two refineries at McPherson as previously announced. The Sinclair program includes a cracking unit, a vapor recovery unit and stabilizer.

North Louisiana and Arkansas

The North Louisiana and Arkansas group of refiners have made practically the same schedule of runs as in July with no change in the status of the operating and shutdown plants.

North Central and West Texas

North Central Texas refiners will run approximately 4,000 bbls. more oil in September than July, the increase being due to the starting up of two idle refineries, as mentioned previously. Except for the resumption of operations in these plants, there is little change in the schedules of the individual plants in this area. West Texas runs show practically no change.

East Texas

The East Texas group of refineries has increased its runs for September about 4,000 bbls., due to increasing the allowable production of crude rather than any greatly increased demand for the refined oil products. This increase in refinery runs is not looked upon as a favorable factor by marketers in the Mid-Continent area, but as yet the operations have not been boosted to any great extent and there is hope that the East Texas refiners will not attempt to flood the northern market with cheap gasoline.

Mid-Continent Refinery Operations

Crude Runs to Stills

	1929	1930	1931	1932
January 1	508,550	535,460	478,795	405,910
February 1	506,800	519,355	470,125	411,280
March 1	514,950	531,500	449,634	401,155
April 1	530,530	555,250	497,391	419,750
May 1	577,500	574,300	510,640	436,160
June 1	583,030	572,250	567,915	440,765
July 1	565,800	548,475	588,840	433,255
August 1	555,250	526,400	590,545	427,710
September 1	552,300	498,710	588,105	430,430
October 1	544,720	518,800	472,190	.....
November 1	545,473	506,700	480,440	.....
December 1	540,630	478,360	456,525	.....

Operations by Districts

	September 1 — Dly. crude capacity (bbls.)	September 1 — Dly. crude runs (bbls.)	August 1 Dly. crude runs (bbls.)	Sept. 1 daily increase (bbls.)
Arkansas	48,000	21,000	21,200	*200
Kansas	153,500	79,400	80,150	*750
North Louisiana	41,000	27,250	27,800	*550
Oklahoma	309,700	147,850	151,050	*3,200
North Central Texas	204,800	97,030	92,735	4,295
West Texas	139,400	35,950	37,100	*1,150
East Texas	79,500	21,950	17,675	4,275
Total	976,900	430,430	427,710	2,720

*Decrease.

REFINERY OPERATIONS IN EAST TEXAS
(Plants which have been in operation during the past year)

Company and location—	Daily capacity	Runs Sept. 1	Runs Aug. 1
Arrow Refining Co., Overton	2,500	800	350
Beacon Oil & Refining Co., Henderson	2,500	1,500	1,150
Boone Refining Co., Arp	500	1,200	350
Constantin Refining Co., Overton	3,000	(*)	(*)
Diamond Refining Co., Overton	3,000	800	675
East Texas Refining Co., Henderson	6,000	(*)	(*)
East Texas Refining Co., Longview	10,000	7,500	5,500
Gladetex Refining Co., Gladewater	500	300	300
Gladewater Refining Co., Gladewater	500	400	450
Guillory Refining Co., Kilgore	200	100	(*)
V.O.E. Refining Co., Gladewater	500	600	530
Kilgore Refining Co., Kilgore	1,500	750	870
Overton Refining Co., Overton	3,500	1,500	1,600
Petroleum Refractionating Co., Longview	10,000	(*)	(*)
Sinclair Refining Co., Camps Switch	5,000	1,500	1,400
Southern Oil Refining Co., Kilgore	2,500	1,000	1,000
Slack Petroleum Co., Willow Springs	2,500	(*)	(*)
Taylor Refining Co., Tyler	15,000	3,800	3,000
H.&M. Refinery Co., Gladewater	200	100	(*)
Total	79,000	21,950	17,675

*Shut down.

REFINERY OPERATIONS IN ARKANSAS
(Plants which have been in operation during the past year)

Company and location—	Daily capacity	Runs Sept. 1	Runs Aug. 1
Berry Asphalt Co., Waterloo	2,000	1,000	1,000
Henry H. Cross Co., Smackover	6,000	4,000	4,000
Houston Oil Co., Camden	6,000	(*)	(*)
Kettleman Creek Refining Co., Pearson	5,000	1,500	1,500
Lion Oil & Refining Co., El Dorado	12,000	4,500	4,500
Macmillan Petroleum Products Co., Norphlet	2,000	2,000	2,000
Ouachita Valley Refining Co., El Dorado	2,000	1,200	1,200
Root Refining Co., El Dorado	10,000	4,000	4,500
Simms Oil Co., Smackover	3,000	2,500	2,500
Union Asphalt Co., El Dorado†	.....	.....	.....
Total	48,000	21,000	21,200

*Shut down. †Reduces residuum purchased from Lion Oil & Refining Co., no crude run.

REFINERY OPERATIONS IN OKLAHOMA
(Plants which have been in operation during the past year)

Company and location—	Daily capacity	Runs Sept. 1	Runs Aug. 1
Altitude Petroleum Corp., Oklahoma City	3,000	700	600
Anderson-Prichard Oil Corp., Cyril	5,000	3,900	3,250
Barnsdall Refineries, Inc., Barnsdall	6,000	3,200	3,250
Barnsdall Refineries, Inc., Okmulgee	10,000	3,500	2,500
Bell Oil & Gas Co., Grandfield	4,500	2,000	2,000
Black Gold Refining Co., Oklahoma City	1,500	700	700
Capital City Refining Co., Oklahoma City	2,500	150	150
Century Petroleum Co., Tulsa	500	(*)	(*)
Century Petroleum Co., Oklahoma City	2,500	700	1,200
Champlin Refining Co., Enid	16,000	7,000	7,000
Continental Oil Co., Sapulpa	10,000	1,200	1,400
Continental Oil Co., Ponca City	30,000	9,700	11,500
Cushing Refining & Gasoline Co., Blackwell	1,500	1,500	1,500
Cushing Refining & Gasoline Co., Cushing	3,500	2,500	2,500
Deep Rock Oil Corp., Cushing	16,000	10,000	19,000
Eason Oil Co., Enid	5,000	3,000	3,000
Empire Oil & Refining Co., Okmulgee	4,000	2,700	3,000
Empire Oil & Refining Co., Ponca City	12,000	8,000	8,000
Garber Refineries, Inc., and Omar Refining Co., Garber	3,500	2,200	2,100
Globe Oil & Refining Co., Blackwell	7,500	6,500	6,500
Gulf States Oil Corp., Oklahoma City	3,500	700	700
Johnson Oil Refining Co., Cleveland	6,000	4,000	4,000
Major Oil Co., Oklahoma City	2,000	200	200
Mid-Continent Petroleum Corp., West Tulsa	40,000	17,000	18,000
Marathon Oil Co., Boynton	2,500	1,500	1,500
Marathon Oil Co., Bristow	5,000	(*)	(*)
Phillips Petroleum Co., Okmulgee	5,000	3,500	3,500
Producers Oil Co., Bristow	2,500	1,000	1,000
Producers & Refiners Corp., West Tulsa	6,000	2,500	2,800
Pure Oil Co., Ardmore	5,000	2,700	2,700
Pure Oil Co., Muskogee	9,000	7,000	7,000
Rock Island Refining Co., Beckett	5,000	4,000	4,000
Sinclair Refining Co., Sand Springs	8,000	2,300	2,300
Speedway Gasoline Refining Co., Oklahoma City	400	200	200
Sterling Refining Co., Oklahoma City	2,000	700	700
Sun Oil Co., Yale	5,000	3,000	3,000
Sunray Oil Co. (C. E. Wright, receiver), Allen	7,000	4,000	4,000
The Texas Company, West Tulsa	15,000	9,000	9,000
Texas Pacific Coal & Oil Co., Wynnewood	3,000	1,500	1,500
Tidal Refining Co., Drumright	15,000	8,000	8,000
Western Oil Corp., Beckett	2,000	(*)	(*)

(Continued on Page 46)

Geology of Southwest Oklahoma and Anadarko Basin Gives Indication of Oil Accumulations

By CLYDE M. BECKER, MURRAY J. WELLS and F. J. FULTON

Southwestern Oklahoma from the Anadarko Basin southward to the Red River, and the Texas Red River counties of Cook, Montague, Clay, Wichita and Wilbarger have produced to January 1, 1932, 675,630,000 bbls. of oil. This is 4.5 per cent of all the oil recovered in the United States to date, 10.2 per cent of the combined oil production of Oklahoma and Texas, 26.8 per cent of the total oil produced east of the Mississippi River and is 150,000,000 bbls. more oil than has been recovered from the entire Seminole area.

There still remains in fields fully developed at least 100,000,000 bbls. of potential oil. This oil has virtually all been developed in sands of the lower Permian and upper Pennsylvanian strata at an average depth to production of less than 2,000 feet. The gravity ranges from 28° to 40°, 70 per cent of which is above 35° Be.

The six major fields of this region are Healdton, Hewitt, Burkburnett, Graham-Fox, Duncan and Sholem-Alechem. The combined area is 27,617 acres, and the total oil recovered to the end of 1931 was 456,367,565 bbls., which is an average recovery of 16,525 bbls. per acre. A study of decline data indicates a potential oil recovery of 71,709,754 bbls. above the economic limit. This will be an ultimate recovery of 528,077,317 bbls., or 19,122 bbls. per acre.

The average depth to production is between 1,900 and 2,000 feet. The estimated average cost per well is $12,675.45 and the total cost of drilling development $81,366,450. On these figures the ultimate production per well is 82,255 bbls. and the cost per barrel for the seven-eighths working interest is $.173. The total number of wells drilled is 6,420, and the area developed per well is 4.3 acres.

Southern Fields

In order to show the possibilities for the development of new fields within this territory, a brief outline of the geology and discussion of structures which are either partially developed or untested is made later. But to illustrate the great potential value of these undeveloped areas, a historical summary of the six major fields mentioned above is herewith given.

In compiling this data we have drawn from all available sources. Much of it is given in Bulletin 40 of the Oklahoma Geological Survey. We have also received much help from the publications previously referred to and on specific data relating to the Tatums and Carter-Knox Fields, which will be referred to as partially developed areas, we are indebted to Frank Gouin and F. W. Floyd, geologists.

Healdton Field

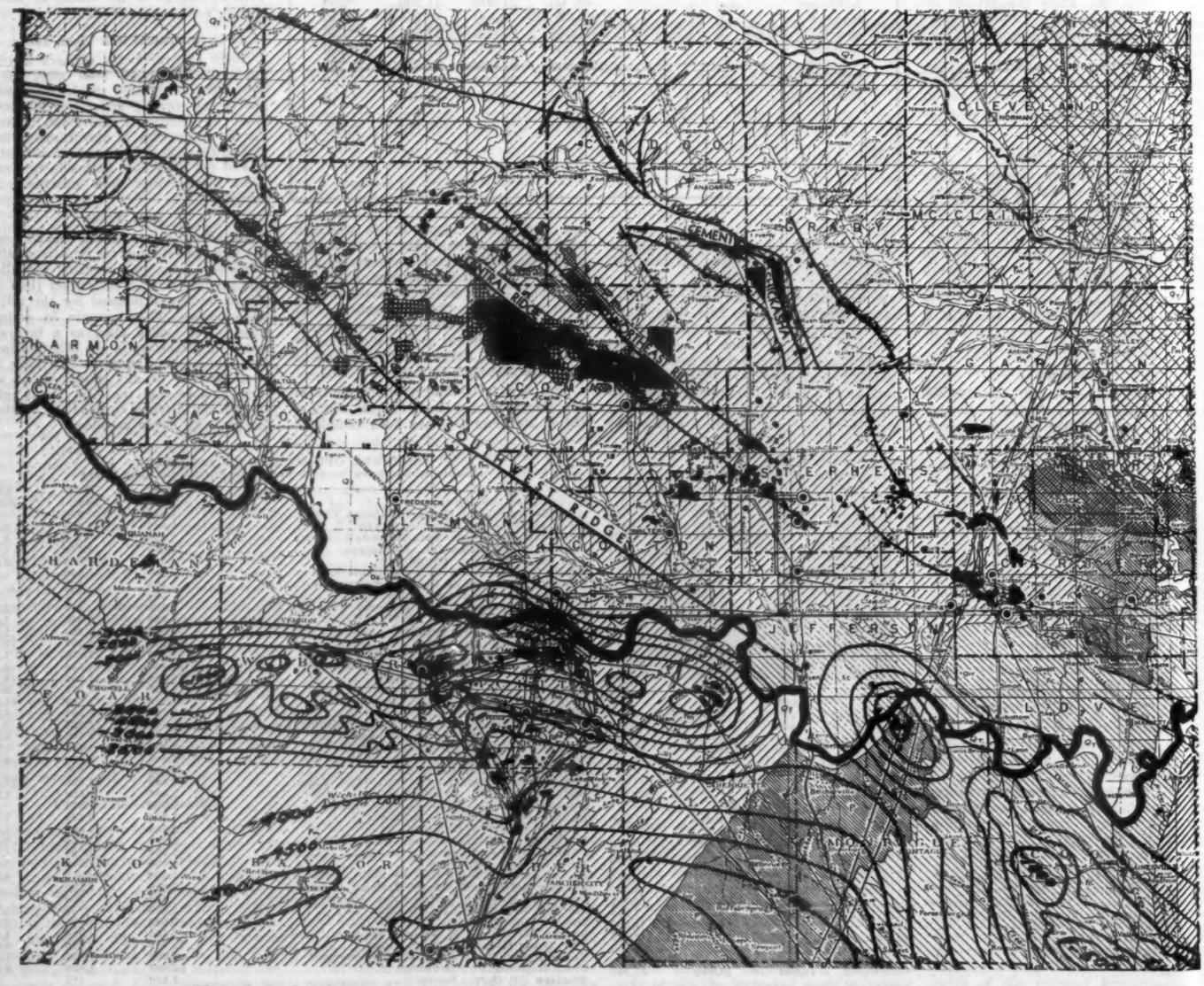
Located in Townships 3 and 4s, 2 and 3w, Carter County, Oklahoma. Discovered, 1913. Developed area, 7,250 acres. Total wells, 1,950. Area per well, 3.7 acres.

Producing sands: Pennsylvanian; Healdton sand zone, 800-1,200 feet; Deeper sands, 1,600-2,050 feet; and Ordovician, three small wells of no importance.

Production end of 1931, 166,195,179 bbls.; per acre, 22,923 bbls.; and per well, 85,228 bbls.

To establish rate of decline: Produced 1930, 4,276,550 bbls.; produced 1931, 3,997,450 bbls; decline, 279,100 bbls.; rate of decline approximately 6 per cent. Assuming the decline over a 10-year period will be 5 per cent, the field will have produced by the end of 1941 an additional 27,685,007 bbls.; per acre, 3,807 bbls.; per well, 14,197 bbls.; total production to end of 1941, 193,880,186 bbls.; total per acre, 26,730 bbls.; total per well, 99,425 bbls.; daily average of production, 3.1 bbls.

Inasmuch as the depth per well of the field averages approximately 1,200 feet, the cost per well is estimated at $8,000; cost of drilling field, $15,600,000; total oil produced, 193,880,186 bbls.; development cost, 8 cents per barrel.



Map of the Southwestern portion of Oklahoma showing the location of the three parallel granite ridges

Gravity of oil, 26 to 42 degrees. Most of the oil produced ranged from 31 to 35 gravity.

Hewitt Field

Located in Township 4s-2w, Carter County, Oklahoma. Discovered, June 19, 1919. Area developed, 2,780 acres. Number of wells, 806. Area per well, 3.4 acres. Depth to producing sands, 2,100 to 3,134 feet. Age, Pennsylvanian. Four producing zones.

Production to end of 1931, 72,368,760 bbls.; per acre, 26,000 bbls.; per well, 89,787 bbls.

To establish rate of decline: Produced 1930, 2,532,550 bbls.; produced 1931, 2,160,050 bbls.; decline, 372,500 bbls.; per cent decline, 14 per cent. Estimated rate of decline over a 10-year period, 10 per cent, at which time the field will be producing 2.6 bbls. per day, assumed to be economic limit.

Field will have produced by the end of 1941 an additional 12,666,044 bbls. of oil; per acre, 4,554 bbls.; per well, 15,709 bbls.; total production to the end of 1941, 85,030,804 bbls.; per acre, 30,554 bbls.; per well, 105,496 bbls.

Assuming an average depth of 2,600 feet per well, average cost per well estimated is $20,000; cost of drilling total field, 806 wells, $16,120,000; total production field, 85,030,804 bbls.; development cost per barrel, 19 cents.

Gravity of oil, 33° to 38° Be.

Graham and Fox Fields

Located Townships 2s3w, 3s2w, 2s2w, Carter County, Oklahoma. Discovered first oil well, Fox, April, 1917; first oil well, Graham, June, 1922. Total area of oil development, 3,700 acres. Total oil wells, 427. Area per well, 8.66 acres. Depth to producing sands, 1,800 to 2,600 feet. Age, Pennsylvanian. Five sand zones. Average depth of wells, 2,200 feet. Estimated average cost per well, $16,500.

Production to the end of 1931, 30,800,000 bbls.; per well, 72,131 bbls.; per acre, 8,324 bbls.; production 1930, 1,639,700 bbls.; production 1931, 1,429,400 bbls.; decline, 210,300 bbls.; per cent decline, 12.8 per cent; estimated decline, average to end of 1941, 10 per cent.

Field will produce next 10 years, 8,379,002 bbls.; per acre, 2,265 bbls.; per well, 19,623 bbls.; at which time the per well daily average will be 2.2 bbls., the economic limit; total production to the end of 1941, 39,179,002 bbls.; per acre, 10,589 bbls.; per well, 91,754 bbls.

Estimated average depth per well, 2,200 feet; average cost, $16,600 per well; drilling and equipping cost, 427 wells, $7,008,200; total field production, 1941, 39,179,002 bbls.; cost per barrel development, 18 cents per barrel.

Gravity ranges from 27° to 39.9°; average, 31° to 33°.

Deeper Pennsylvanian sands: There are believed to be at least three deeper sand zones within reach of the drill which have not been penetrated in this field.

Sholem Alechem Field

Located in Townships 2s-3w, 1s-3w, 1s-4w, Carter and Stephens Counties. Discovered, October, 1923. Total area, 3,370 acres. Total oil wells, 337. Area per well, approximately 10 acres. Depth to producing oil sands, 2,800 to 3,300 feet. Geologic age, Pennsylvanian. Average depth, 3,100 feet. Estimated cost completed well, $23,250.

Production of field to end of 1931, 25,140,417 bbls.; production per well, 74,600 bbls.; per acre, 7,460 bbls.; production 1930, 4,482,450 bbls.; production 1931, 4,545,250 bbls.; decline 297,200 bbls. Per cent decline, 6 per cent; estimated decline over 10-year period, 5 per cent.

Field should produce by end of 1941, 34,563,006 bbls.; production to date, 25,140,417 bbls.; total to end of 1941, 59,703,423 bbls.; total per acre, 17,716 bbls.; per well, 177,161 bbls.

At the end of this period, without additional drilling, the field should still be producing annually 2,721,413 bbls., or an average per year per well of 8,075 bbls., or a daily average of 22 bbls. per well. This indicates that the field will have at least an additional 10 years of life and additional production to bring the per acre yield well above 20,000 bbls.

What is known as the Fourth sand zone between the depths of 3,500 and 3,800 feet is as yet undeveloped, although shows of oil have been found in several sands.

Total production in 1941, 59,703,423 bbls.; per well cost of development, $23,250; cost for total field, $7,835,250; cost per barrel, 13 cents. This cost will be reduced considerably before economic limit is reached.

Gravity, 27° to 36°. Most of the oil produced is of the higher gravity.

Duncan Field

Located in Townships 1n-8w, 1n-9w, 1s-8w, 1s-9w and 2s8w, Stephens County, Oklahoma. Discovered, April, 1920. Developed area, 2,516 acres. Number of wells, approximately 500. Area per well, 5 acres. Depth to producing sand, 1,400 to 2,600 feet. Average depth, 2,050 feet. Geologic age, Upper Pennsylvanian. Average cost completed well, $12,000.

Production to end of 1931, 37,586,309 bbls.; per acre, 14,938 bbls.; per well, 75,172 bbls.; production 1930, 3,029,800 bbls.; production 1931, 2,459,650 bbls.; decline, 570,150 bbls.; per cent decline, 15 per cent; estimated average decline 10-year period, 10 per cent.

Field should produce by end of 1941, 13,560,595 bbls.; produced to date, 37,586,309 bbls.; total to end of 1941, 51,146,904 bbls.; per acre, 20,328 bbls.; per well, 102,293 bbls.; field should be producing in 1941, 952,921 bbls.; daily average per well, 5.2 bbls., which is still above the economic limit.

No deeper sands are expected because the field is underlaid by Arbuckle lime.

Total production to end of 1941, 51,146,904 bbls.; cost of development, estimated, $12,000 per well; cost of development of field, $6,000,000; development cost per barrel, 11 cents.

Gravity, 39 degrees.

The Duncan Field is the greatest producer of light gravity oil developed in southern Oklahoma, and because the grade of the oil is high the per cent of profit between the cost of development and the price received for oil is higher than in the other fields of the area.

Burkburnett Field

Located in north Wichita County, Texas, immediately south of Townships 5s-13w and 5s-14w, Oklahoma. The northwest end of the field extends across Red River into Township 5s-14w, Tillman County, Oklahoma. Discovered in 1919. Developed area, approximately 8,000 acres. Estimated number of wells, 2,400. Area per well, 3.33 acres. Depth to producing sands, 1,300-1,650 feet. Average depth, 1,550 feet. Geologic age, Upper Pennsylvanian. Estimated cost per well, $12,000.

Production to end of 1931, 124,277,000 bbls.; per acre, 15,534 bbls.; per well, 51,780 bbls.; produced 1930, 2,871,750 bbls.; produced 1931, 2,345,150 bbls.; decline, 536,600 bbls.; rate of decline, 18 per cent.

The rapid rate of decline is largely due to the pulling of many wells, and while the field as a whole has not reached the economic limit, it is impossible to tell what effect these abandoned wells will have on the future production. Therefore no attempt is made to establish the potential oil remaining.

To show the undeveloped probable oil and gas reserves of Southwest Oklahoma and North Texas, the following partially developed fields and undeveloped structural areas will be discussed:

Cement-Chickasha structure.

Carter-Knox, Pursley and Harness gas areas. (Grady County anticline.)

Velma-Cruce structure.

Tatums oil field.

Binger structure, Caddo County.

The area northeast and north of the Wichita Mountains.

Structures in the Palo Duro Basin in south Greer, Harmon and Jackson Counties, Oklahoma.

Geology

The oil and gas fields of this region are found along the axis or on the flanks of a series of major structural folds, which appear to be related to the uplift which developed the Wichita Mountains. This folding occurred in late Mississippian or early Pennsylvanian time and affected all the sedimentary strata older than Pennsylvanian. These old folds were deeply eroded, resubmerged and buried by the sedimentary deposits of later Pennsylvanian and Permian age.

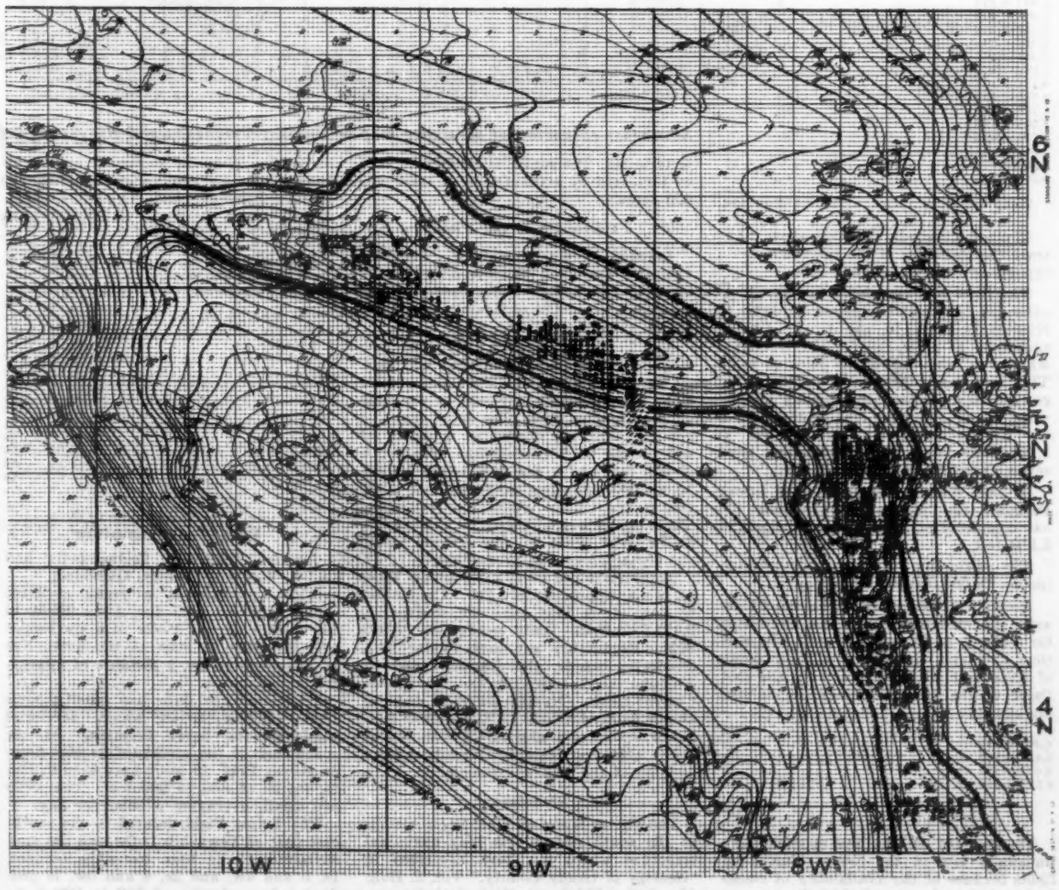
Oil production to date has been developed where these younger formations lap up against the flanks of the older structural highs or extend across their crests, differential settling having had the effect of gentle folding in the superimposed strata.

Possibilities for future oil development are on undeveloped folds of this type, and in the old heavily folded strata of the Mississippian, Devonian and Ordovician formations, the Wilcox sands belong to the Simpson division of the Ordovician.

Chickasha-Cement Anticline

This structure has been proved by production of oil and gas from the northeast of Section 35-6n-10w to the northeast of Section 36-4n-8w, a lateral distance along the axis of the anticline of 21 miles, except for 4 miles across Sections 7, 8, 16 and 15-5n-8w, which part of the structure has not been drilled. Surface folding indicates that future development will add important extensions to both the southeast and northwest parts of the structure. The area fully proven by production in the Cement Field is 4,500 acres, and in the Chickasha gas field 6,500 acres. The size of the structure indicates that the future productive area will be fully twice the amount now proved by production, or 22,000 acres, and in the writers' opinion the Chickasha-Cement anticline is the greatest partially developed reservoir for oil or gas in the Mid-Continent Field, with the possible exception of East Texas.

Production to date has come from sands in the Permian and Upper Pennsylvanian. The first well completed in the Cement Field was drilled in 1917 by the Oklahoma Star Drilling Co. It was completed for a small oil well at a depth of 1,510 feet in the Garber sandstone, later



Regional Structure Map of Cement-Chickasha and Binger Areas

called the Caddo sand. Subsequent drilling resulted in the development of the Fortuna sand series at depths ranging from 2,100 to 2,500 feet. Approximately 250 wells were drilled and 6,000,000 bbls. of oil produced to date. In 1929 the Noble-Olsen Drilling Co. discovered what is now known as the Noble-Olsen sand, at a depth of 3,170 feet. This well was good for 300 bbls. Since that date 25 oil wells have been drilled. Their combined production on March 20, 1932, was 1,651,855 bbls. of oil. The average age of the wells at that time was two years. In August, 1930, the Mid-Kansas Oil & Gas Co.'s No. 9 Wade was completed at a depth of 4,050 feet. To date four wells have been drilled to this sand. On March 20, 1932, these four wells had produced 328,884 bbls. of oil. The average age of the wells was 20 months. In August, 1930, the same company completed their No. 6 Bert Lackey at a depth of 4,953 feet for 50,000,000 cubic feet of gas, and the same month the Magnolia Petroleum Corp.'s No. 5 Belle Hedlund was completed at 4,520 feet for 35,000,000 cubic feet of gas.

The Caddo sand is a part of the Garber sandstone of the Middle Permian, the Fortuna sand belongs to the Wellington formation of the Middle Permian, the Wichita Albany or basal Permian is the formation in which the Noble-Olsen is developed. The Mid-Kansas Oil & Gas Co.'s No. 9 Wade and the two deep gas sands are believed to be in the Deese formation of the Upper Pennsylvanian. The Noble-Olsen sand series and the three sands discovered in the Upper Pennsylvanian appear to be very important from the standpoint of future oil and gas production.

Deep-Well Record

Deeper sands logged in the Mid-Kansas-Ramsey No. 6 Preston-Culp, NW NE Section 6-5n-9w, showed many possible horizons of production. Following is the log of the sands:

Thickness (ft.)—	Oil (ft.)	Gas (ft.)	Not cored (ft.)
6,038-6,077	39	...	...
6,767-6,779	...	3	...
7,098-7,111	13	...	...
7,193-7,220	...	...	35
7,305-7,330	25	...	...
7,495-7,560	...	...	65
7,690-7,745	55	...	...
8,115-8,135	...	...	20
8,260-8,290	...	30	...
8,360-8,410	...	50	...
8,568-8,585	...	...	17
8,735-8,820	...	85	...
8,830-8,835	...	5	...
8,860-8,870	...	...	10
9,700-9,875	...	...	175
Total	151	172	332

The sand records as given above illustrate the thickness of the reservoir strata capable of containing oil or gas.

The first well completed in the Chickasha gas field was completed by John B. Nichlos in 1922 in the Upper Garber sandstone at a depth of 1,300 feet from what was later called the Nichlos sand. This well made 39,000,000 cubic feet of gas per day. Subsequent drilling has developed the following gas sands, all in the Middle Permian: Nichlos No. 2, 1,700-1,900 feet; Meridian-Ramsey sand series, 2,000-2,500 feet.

In the Wichita-Albany of the Lower Permian the Magnolia Petroleum Co. has completed one gas well at a depth of 3,170 feet.

The production of gas to date approximates 70,000,000,000 cubic feet.

Relative to deeper sands on the Chickasha gas structure, the Alma Petroleum Co.'s No. 1 Al Wood, SW SW SW Section 12-4n-8w, drilled to a total depth of 4,950 feet but located low on the east flank of the structure, logs the following sands:

	Feet
4,342-4,390 ft.	48
4,445-4,455 ft.	10
4,458-4,475 ft.	17
4,586-4,640 ft.	54
	129

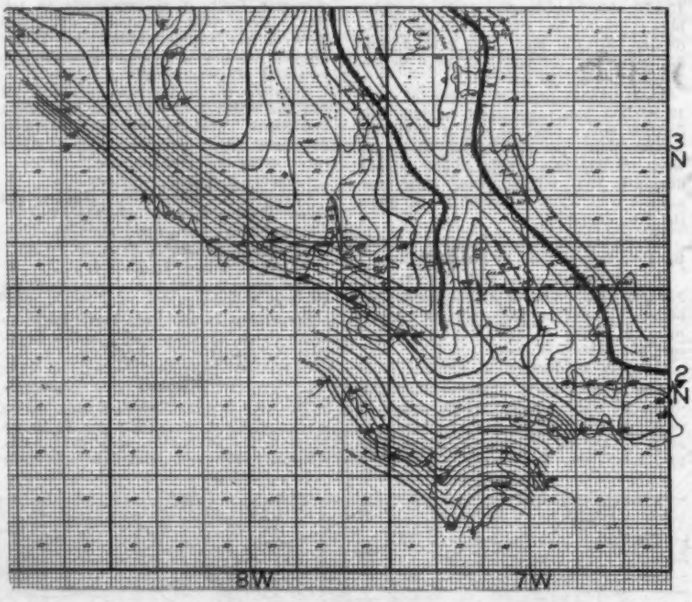
The costs of drilling and operating are unusually low in the Cement-Chickasha fields because of the availability of cheap fuel and the absence of thick limestones, granite wash or other hard formations. Good highways make both fields accessible for trucking in drilling equipment.

Summary

The Cement Field has produced 6,000,000 bbls. of oil from the sands in the Middle Permian and nearly 2,000,000 bbls. of oil from the sands of the Lower Permian. The Chickasha Field has produced 70,000,000,000 cubic feet of gas from these same sands. The Cement Field has produced to date approximately 340,000 bbls. of oil from four wells drilled into the Pennsylvanian. The Chickasha Field shows the presence of sand horizons in the Upper Pennsylvanian which undoubtedly will produce oil or gas when developed on structure.

The sands developed at Cement in the Preston-Culp well illustrate the great possibilities for oil and gas production in the deeper strata of the Pennsylvanian.

The combined proven area of the two fields is 11,000 acres, and the lateral extent of production along the structure is 17 miles. The probable productive area as indicated by structure is at least 22,000 acres.



Southeast extension of structure map of Cement-Chickasha and Binger Areas

Carter-Knox Oil Field

Located Township 2n-5w, Stephens County; Township 3n-5w, 4n-5w, Grady County, Oklahoma. Discovered in 1922 by Becker-Reed Oil & Gas Co. and Walter H. Gant and others.

No. 1 Hutson-Wooten, SW SW Section 31-4n-5w, was an 18-bbl. oil well, oil being 22 gravity. This well has proved to be the northwest extremity of the field as developed to date. The same year the Joe Ray Oil Co. completed a small oil well in the Garber sandstone at a depth of 955 feet and a gas well which gauged 15,000,000 cubic feet at a depth of 1,350 feet in the Upper Wellington formation. These wells were located in Section 28-3n-5w near what is now known to be the center of proven production.

Total developed area, 2,000 acres. Total oil wells, approximately 200. Production to date, from best available sources, is 9,171,535 bbls. Daily production, 3,000 bbls. Production per acre, 5,000 bbls. Producing sands, the Ramsey sand or Fortuna sand series of the Chickasha-Cement fields. Gravity, 34 to 38 degrees. Depth to production, 1,300 to 1,800 feet. A few wells are producing oil from depths below 2,000 feet from the Wichita-Albany division of the Lower Permian.

Structure

The Carter-Knox oil field is on a dome at the south end of the long anticlinal structure which has been described in "Geology of Grady County," Vol. 2, Bull. 40, of the Oklahoma Geological Survey, by Clyde M. Becker. The Carter-Knox production extends along the crest of this structure for a distance of 8 miles, from Section 2-2n-5w to Section 31-4n-5w.

In Section 17 and 16-4n-6w and Section 1-4n-7w, gas wells from 3,000,000 to 21,000,000 cubic feet have been developed, the completions ranging in depth from 1,800 to 2,000 feet in the Upper Ramsey sand series. This is known as the Pursley gas field.

In Sections 15 and 22 and 23-5n-7w a number of gas wells of approximately the same size have been drilled to the same sand series, the Upper Ramsey. This is the Harness gas field. The distance from the southeast end of production in the Carter-Knox Field to the Harness gas field is 21 miles. Most of the area between the three fields remains undrilled, neither proved or condemned. But the surface structural geology shows a continuous structure for the whole distance, and for several miles on to the northwest of the Harness gas field.

The deep test of the Carter Oil Co. in Section 27-3n-5w showed a number of good sands as yet undeveloped in the Lower Permian and Upper Pennsylvanian, above the depth of 5,400 feet, as follows:

Carter Oil Co.'s No. 6 Carter Kearns, NW SE SE Section 27-3n-5w
(Corporation Commission log)

	Feet
3,033-3,053	20
3,228-3,270	42
3,480-3,500	20
3,548-3,560	12
3,626-3,638	12
3,724-3,765	41
3,965-4,050	85
4,220-4,230	10
4,311-4,322	11
5,028-5,056	28
5,130-5,160	30
5,178-5,218	30
5,230-5,370	140
Total	491

Velma-Cruce Structure

Located Townships 2s-4w, 2s-5w and 1n-5w, Stephens County, Oklahoma.

This structure is a great anticline which extends from the Alma Field in the eastern part of 2s-5w in a northwesterly direction at least to the north line of Township 1n-6w, a distance of approximately 20 miles.

Production to date has chiefly come from shallow fields which developed sands in the basal Permian. At the south end of the structure in the Alma or Milroy Pool, 70 wells have been drilled to depths of 350 to 900 feet. The wells are small, averaging 3 bbls. per day.

The Velma Field, located in the southeast part of Township 1s-5w and the area surrounding the four township corners, 1s. 5 and 4w, and 2s, 4 and 5w, is producing from depths of 350 to 900 feet; 450 wells have been drilled.

The present production is approximately 1,500 bbls. per day. Total production to date is approximately 3,000,000 bbls. Gravity, 28 degrees.

Several wells have been drilled in Section 32-1n-5w to depths of approximately 1,700 feet in the basal Permian.

The production from these wells averaged between 20 and 25 bbls. per day, gravity 28 degrees.

One gas well has been drilled in Section 19-1n-5w, with an initial flow of 20,000,000 cubic feet, depth 1,720 feet.

In Section 12-1n-6w several wells were drilled to a depth of 850 feet to the Upper Wellington. The wells range from 3,000,000 to 18,000,000 cubic feet of gas.

Several deeper tests have been drilled into the Pennsylvanian formations without development of commercial production, but not sufficient work has been done to condemn the Pennsylvanian, and the writers believe that the north end of the structure, on what is known as the Cruce anticline, is a very good place to explore for Ordovician production.

Tatums Field

Located in Sections 13, 14, 23 and 24-1s-3w and Sections 19, 30, 31 and 32-1s-2w, Carter County, Oklahoma. Total area, 1,800 acres.

According to Krohn's Review, at the end of 1931 there had been 119 oil wells and 1 gas well and 16 dry holes drilled in this area. The average daily production was 5,993 bbls. from 109 wells. Depth of wells, from 2,080 to 3,100 feet with most of the completions between 2,200 and 2,400 feet. Oil comes from a series of sands in the Upper Pennsylvanian; combined thickness at least an average of 100 feet. Gravity of oil, 28 degrees. Production to date, 8,212,775 bbls.

It is impossible to develop data which will indicate the ultimate production because the field is on proration, but the ultimate yield per acre should be very large.

This field is an important example of what may be expected from Pennsylvanian sands which overlap the formations which form the structure of the Arbuckle and Wichita Mountains. Structural folding has nothing to do with the Tatums Field. The type of occurrence is similar in many respects to the East Texas oil field.

Binger Structure

Located in the S half Township 10n-10w and the surrounding area in Townships 10n-11w, 9n-10w and 9n-11w, Caddo County, Oklahoma.

This structure is wholly undeveloped but represents an area of great promise of future oil development. The total area is not less than 20,000 acres as expressed by folding in the surface strata. Because it lies on the north side of the Anadarko Basin it is believed that the Lower Pennsylvanian formations will be absent, and the depth to the Ordovician about the same as at Oklahoma City plus 1,200 to 1,400 feet of Upper Permian formations which are absent at Oklahoma City.

Permian and Pennsylvanian sands should produce oil and gas as they do at Cement and at approximately the same depths.

This structure is all held under lease by the various oil companies. The Pure Oil Co. is the largest holder, owning approximately 13,000 acres. The Denver Producing & Refining Co. also holds a large block of leases well located on the structure.

Area North and Northeast of the Wichita Mountains and South of the Anadarko Basin

The Wichita Mountains consist of three parallel granite ridges which were originally overlain by the Arbuckle limestone, Simpson, Viola (Ordovician), Hunton (Devonian) and Mississippian formations. Where the mountains are exposed to the surface the sedimentary material has all been removed, except around the northeast flank of the mountains, and a few remaining fragments of Arbuckle lime at the southeastern extremity near Fort Sill.

Where the mountains are now buried by Permian and Pennsylvanian sediments,

Any refiner can make pretty good gasoline but that isn't good enough

Storage tanks are full of pretty good gasoline—it's hard to sell

Dubbs refiners make the best of gasoline at lowest cost

And they could sell more than they make

And at a profit

Universal Oil Products Co
Chicago, Illinois

Dubbs Cracking Process
Owner and Licensor

much of the original sedimentary strata remain, along the tops of the old ridges.

The three granite ridges, as shown on the accompanying map, are called the Southwest, Central and Northeast ridges. Along the southeastward extension of the Southwest ridge the Oscar, Nocona and Cook County oil fields have been found. And on the northwestward extension of this ridge the oil and gas production of Wheeler and Gray Counties, Texas, have been developed. In fact, as originally mapped, all the oil and gas production of the Texas Panhandle was on the Southwest granit ridge of the Wichitas. But among geologists who have made an intensive study of the Panhandle region, the theory is that there are two and possibly three parallel granite ridges which form the structure of the Panhandle production.

On the southeast extension of the Central ridge the South Duncan and Comanche oil fields were found, and the North Duncan Field is on the southeast extension of the Northeast ridge. The Walters oil field is on the flank of the Wichita uplift, between the Central and Southwest ridges. The Sayre oil and gas field is on the northeast flank of the northwest extension of the Southwest ridge. This data shows the importance of these structural features in the development of oil fields. Nevertheless, except for a little exploration work along the northeast flank of the Northeast ridge, and some close to the mountains drilling at Gotebo, the area north and northeast of the mountains is unexplored.

The fields referred to on the southeast extension of the three ridges have produced approximately 75,000,000 bbls. of oil, and the combined production of the Panhandle region to January 1, 1932, is 176,478,000 bbls., and in addition to this the Panhandle is the greatest known reservoir of natural gas in America.

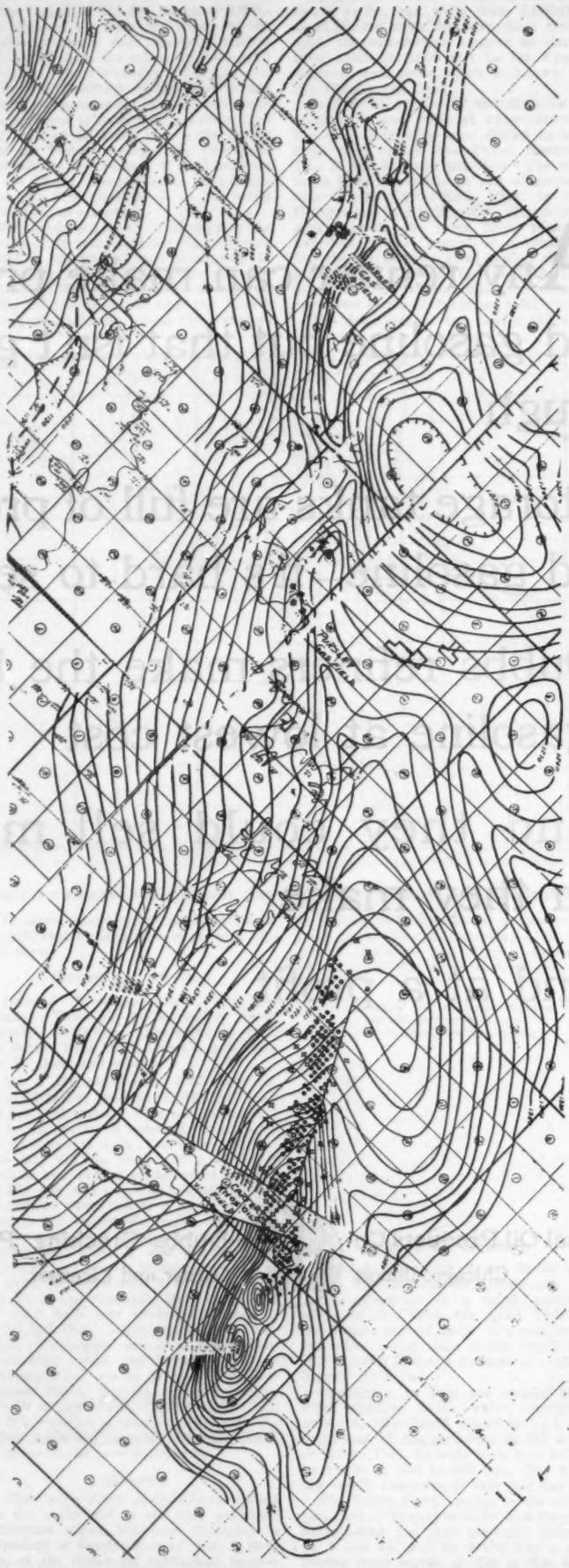
Hanbury Field

Relative to exploration work along the northeast flank, in what is called the Hanbury Field, in Sections 19, 30 and 32-2n-9w and Section 24-2n-10w, production was found in the basal Permian and granite wash of the Upper Pennsylvanian at depths ranging from 1,500 to 2,000 feet. Due to the failure to recognize geologic conditions on the part of the operators, most of the wells were drilled too deep into the underlying dry granite wash deposit. These dry bodies of gravel robbed the upper sands and decline was very rapid in wells which were drilled too deep. However, several wells were handled properly and are still producing. One well, the Hanbury Oil Co.'s No. 1 Price, in the SW NE Section 30, came in for 400 bbls., had a normal decline and, it is understood, is still producing 7 bbls. per day. The Hanbury was drilled in the summer of 1926. A northwest offset to this well, the Bridewell-Heydricks' No. 1 Price, came in in 1926 at 68 bbls. initial and is still doing 7 bbls. These wells produced from the 2,000-foot horizon, and the gravity of the oil is 41 degrees.

In the SE NE Section 24-2n-10w, the Westheimer & Daube's No. 1 Watson developed production at 1,600 feet. The well produced an average of 100 bbls. per day for the first year, and is now reported to be pumping 10 bbls. per day. This well was discovered in the summer of 1926. In Section 3-3n-10w the Becker-Reed Oil & Gas Co., drilling in the SW SE SW, developed two oil sands in the basal Permian at 1,100 to 1,112 feet and from 1,433 to 1,450 feet. This well was drilled in July, 1926. The first sand on a 30-day test averaged 18 bbls. per day of 28 gravity oil, and the second sand made 22 bbls., initial gravity being 34. One other well was drilled to the lower sand, and both sands have held up well for three or four years. This production is from the Lower Permian.

In Section 32-4n-10w, Ashton-Abernathy, drilling in the NE NW, developed what was believed to be a commercial oil show at 2,250 feet in the top of the Viola lime. In attempting to swab, the hole was lost, as was a second well which was drilled to test this sand.

Other wells which have had some shows of oil and gas are Becker-Reed Oil & Gas Co.'s No. 1 Hines, NE NW Section 30-4n-10w; Wirt Franklin's No. 1 Hollis, NW NW Section 2-4n-11w; Ashton-Abernathy's No. 1 Oswald, SW NW Section 23-5-11. These shows, with the exception of the Ashton-Abernathy test, Section 32-4n-10w, and the Becker-Reed No. 1 Hines, were found in the overlap formation of the basal Permian or Upper Pennsylvanian.



Structural map of Harness and Pursley gas fields, and Carter-Knox Oil Field

Gotebo Field

No other tests have been drilled along the northeast flank of the mountains beyond Ashton-Abernathy's No. 1 Oswald for a distance of 15 miles. In Section 8-6n-13w three wells have been drilled, all of which had good oil showings in detrital material at the base of the Permian. In Section 8-7n-16w, Hartman-Busy developed heavy oil in the detrital material at the base of the Permian. The shallow production around Gotebo is well known. This production comes from the basal part of the Middle Permian beds where they overlap the truncated formation of the Simpson. This leads to the belief that when properly located wells will be found in the Wilcox and other Simpson sands. Only two wells have been drilled into the Wilcox. The Marland Oil Co.'s No. 1 Tah-Lah-Ta-Tite found small showings of gas in a Wilcox section from 1,914-2,060 feet. This well was drilled very near the mountains, and the effects of folding had compressed the sand to a quartzite in most of the section.

In Section 6-6n-15w, Johnston-McDowell drilled Wilcox sand from 2,590-2,700 feet. The upper part of the sand was dry but water was encountered below a small shale break at 2,680 feet. The well stopped in sand.

The wells drilled thus far on the northwest extension of the Northeast and Central ridges have been drilled too close to the mountains to develop production of commercial grade in either the overlap formations or the comformable strata of the Wichita uplift. Wells which were properly located farther out in the basin, such as the Sun Ray Oil Corp.'s No. 1 Countryman, Section 3-7n-17w, did not go deep enough to reach the contact zone where productive sands could be expected.

There has been no development to date which would tend to disprove the probability that oil fields will be found on the northwest as well as the southeast extensions of the granite ridges of the Wichitas.

Palo Duro Basin

Between the Wichita Mountain uplift and the westward extension of the Electra arch, through Wilbarger, Ford and Cottle Counties, Texas, is a deep basin known as the Palo Duro. Although little known, and seldom discussed in geologic literature, this basin is probably as deep and as important a structural feature from the standpoint of oil production as the Anadarko basin. Within this area of deep sedimentation are several important structures of the anticlinal type, only one of which has been drilled into the Upper Pennsylvanian. Two wells have been drilled; one reported no showings to a depth of 3,229 feet, the other drilled on the south flank and reports a show of oil just below 2,800 feet. The other structures have not been drilled deep enough for any kind of a test. In fact, only a few wells have been drilled in this entire region, and the area warrants careful study, followed by intelligent exploration. This territory, like the North Central Texas oil fields, will probably produce chiefly from the Pennsylvanian, but there are possibilities of production in the Ordovician, because this basin is west of the great eroded Arbuckle plateau which extends southward from the Wichita Mountains into north Wichita and Wilbarger Counties, Texas.

Conclusion

The region covered by this paper is approximately 150 miles east and west and 100 miles north and south. It has already produced more than 600,000,000 bbls. of oil. The known structural and stratigraphic features indicate the probability of the discovery of other fields equally prolific. The country is accessible to railroads, good highways and supply houses. Partially developed structures, such as the Chickasha-Cement and Grady County anticlines, indicate the exact location of great oil fields, and showings around the flanks of the mountains and other structures indicate the possibilities for future exploration.

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Price Cutting Parasites

Entering the season of lesser consumption the oil industry finds two disturbing factors dominant. These are the retail marketing situation and the leaks in crude proration.

The retail marketing situation has been in a very unsatisfactory condition. Hopes for stabilization have been repeatedly deferred and disappointed. The industry has a feeling that it has been cheated of its rightful deserts. Demoralizing elements have been more active than ever, spurred, perhaps, by the knowledge that for the first time there was less gasoline being bought.

But, in addition to this and all the ordinary causes contributing to breaking a market, there has been this year these leaks in proration sapping the foundations of the whole structure.

Small, it may be, in comparison to the total quantity of crude oil produced these leaks have been a thorn in the side of proration for several months.

There is a possibility of that situation being aggravated by the increase of East Texas allowable to 50 barrels daily per well.

It is difficult to discern at this time any possible outlet for additional crude and it is obviously a potential troublemaker.

Every oil man knows that from now on, so far as current consumption is concerned, less crude, rather than more, will be required.

Daily average production is still well above the 2,000,000 barrels which has been held to be the minimum point for stabilization.

Major buyers who take the great bulk of production in East Texas have in several cases reduced their takings in other fields and reduced even their own production in order to provide an outlet for East Texas oil. Some of them naturally feel they are not in position to take on additional crude at this time.

This may throw the market for the additional seven barrels to concerns which are only interested in purchasing oil under the posted schedule of the companies who are buying crude on the Mid-Continent price scale.

The effect would be at once apparent—we would have 43 barrels on one price basis and 7 barrels on another, an impossible situation.

It would speedily be found that the bulk of the crude could not be sold at 98 cents while the seven barrels were being offered at 25 to 50 per cent of the Mid-Continent price.

In other words, unless outlets are found for the additional crude East Texas will find that 86 per cent of its production will be forced down to the price level established for the 14 per cent sold at distress prices.

This 14 per cent will come into direct competition with the 86 per cent either in refinery market or retail market, aggravating an already weakened marketing situation.

It is no secret that many of those charged with the responsibility of distributing refinery products are finding that leaks in the crude proration schedule are constantly making their problem more difficult of solution.

Crude oil produced in violation of proration orders has been sold from 25 to 50 per cent under the posted schedule. In addition, there are operations in which illegal crude oil is not sold as such but is moved to the owner's refinery and made into petroleum products along with that made from crude that has been legally produced.

With the cost of crude oil representing 75 per cent of the refinery cost of production refiners operating partially or entirely on illegally produced oil have an important advantage over competitors who use only legitimate crude.

Such companies have not hesitated to sell under the going tank car market to price cutters in the retail end who in turn have been in position to lower their retail prices, bringing about a wholly unsatisfactory condition in many of the larger consuming centers.

If this situation in the retail market is not remedied it must lead to a general lowering of prices on the part of the legitimate operators and in turn to lower prices for crude oil also.

There is danger also in the fact that if there is an excess of seven barrels of legitimate oil to be disposed of under the market that very much more than seven barrels will be produced and got rid of in the same manner. If it has been difficult to obtain a check on illegal production it will probably be found much more difficult when it is complicated by the production of seven barrels per well of legitimate oil for which there is no regular outlet.

Taken in connection with existing conditions in the retail markets the proration situation must add to the anxiety of everyone hoping for stabilization of the industry.

Here we are at the close of a main consuming season, which for the first time showed a decrease from the preceding year, entering the fall and winter season with top-heavy stocks of crude and gasoline and with the retail situation in about as bad shape as it could possibly be and with the further menace of distress crude being unloaded for what it will bring in a market without legitimate outlets.

It might be supposed that everyone in the oil industry is familiar with what may be expected to happen in such circumstances and that every effort would be made to avert it by providing a remedy.

When 43 barrels of oil can be sold for 98 cents a barrel what advantage can there be to a producer to produce 7 barrels more to be sold for 25 or 50 per cent of the 98 cents schedule, forcing down the price for the whole 50 barrels to the 7 barrel price level?

This is no theory, but has been demonstrated time and again in the past few years. Is another demonstration of its folly necessary?

The gasoline made from this distress oil is a constant menace to the retail market and to the entire petroleum industry's price structure.

The only profit goes to a few price cutting parasites who thrive on the loss of the whole industry.

The consumer is not benefited because gasoline is kept so cheap that it is a constant temptation to tax levying bodies to add to the tax which already equals all the industry gets for finding the oil, transporting, producing and refining it.

There is one force that can combat such a development—a thoroughly aroused and ever vigilant public opinion in the industry. It has been shown in what has been accomplished towards curtailment of crude production and refinery output in the past few years.

So far as it has failed it has been due to failure to press on to greater accomplishment.

The industry can deal with the retail marketing situation and these leaks in proration if it sets its mind to do it.

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Gasoline Markets in Oklahoma Reflect Unsettled Situation in Crude Oil and Retail Markets

By C. O. WILLSON

Two developments contributed to an unsettled refined market in Oklahoma and the Mid-Continent generally during the past week. One was the continued uncertainty regarding probable changes in the gasoline tank wagon and service station price structure of the Middle West and Southwest and the other was the action of the Texas State Railroad Commission in increasing the allowable production per well from 43 to 50 bbls. Both developments were furnishing considerable data to support the arguments of those who are taking a generally bearish position regarding the immediate trends both in crude oil and refined products.

In Oklahoma prices are lower on all grades of refinery gasolines and most of the grades of natural gasoline. So far as Oklahoma is concerned, less cheap gasoline was being offered on the open market than was the case last month due to the fact that the plant operations of several low price refiners have been curtailed materially as a result of the action of state officials in enforcing proration orders. However, despite this fact, the trade position in regard to gasolines is pessimistic and several sellers found it necessary to reduce their quotations on one or more grades one-eighth cent.

Prices were being maintained on all grades of fuel oil, gas oil distillate and kerosene. The furnace oil distillates which have been tight for several weeks were more freely offered, especially the straw and prime white grades. Low cold test fuels and all grades of gas oil were strong in the Oklahoma area where supplies have been reduced due to the curtailment of operations of plants in the Oklahoma City Field.

The important reduction of the week in the Oklahoma (Group 3) market was another 2-cent decline in bright stock quotations, the second in less than a month. Manufacturers said the reduction was made to meet lower prices in Pennsylvania and the Gulf Coast.

Market observers in Oklahoma are inclined to place the blame for the continued weakness in tank car gasoline quotations on the uncertain conditions in the retail market and the fear of excess crude oil production in East Texas due to the increase in the allowable output. One observer stated that there are less weak spots in the Oklahoma, Kansas and North Texas market than any time this summer with conditions pointing to higher rather than lower quotations on refinery products.

On Saturday it was announced that the Standard Oil Co. (Indiana) was not making any more contracts with retail customers based on the discount plan made effective August 20. This plan provided for rebates of 2 cents per gallon in the case of regular and premium grades of gasoline and 1 cent on the third grade where buyers purchased 100 or more gallons monthly. This action brought a storm of protest from competing companies some of which met the situation by giving the discounts to all their customers at the time of purchase regardless of the quantity purchased. Due to this development, it appeared that the retail distribution was headed for a 2-cent reduction in the tank wagon and service station schedules in the regular and premium grades and 1 cent in the third grade. Such a drastic action it was thought would certainly be accompanied with reductions in the posted schedules for crude oil.

At this writing it was not known what would develop to straighten out the jumble in the retail market. It is not believed that the Indiana Standard will rescind its action on the 100-gallon rebate plan and return to its former schedules without making some changes. The various types of price cutting which were responsible for the action in the first place, continue and it is certain the largest distributor of gasoline in the Middle West will adopt some plan which will adequately cope with this situation. One report is that a new system of rebates will be adopted to take care of the commercial

Refined Market Barometer

The close of the main motor fuel consuming season for 1932 with a Labor Day holiday found the refinery gasoline tank car markets in a generally unsettled condition. Unsatisfactory tank wagon and service station markets coupled with uncertainty regarding the crude oil situation is reflected in the refinery gasoline market which is now faced with a decreasing demand extending over a period of several months. What price changes were made in gasoline over the past week were downward with some additional reductions in tank wagon and service station prices. All grades of fuels were generally unchanged with a strong market situation at several interior consuming points. Several areas reported an improved market for gas oil. The only price change in kerosene was in Pennsylvania where prices were lowered. Bright stock quotations were reduced in Pennsylvania, Gulf Coast and Mid-Continent with scattered reductions in neutral oils. No important changes in wax.

Mid-Continent—Bright stock prices reduced 2 cents per gallon. Refinery gasoline and natural gasoline quotations fractionally lower. Kerosene firm. Furnace oils more freely offered with no changes in quotations. Good demand for low cold test fuel oils and gas oils.

East Coast—Refinery tank wagon on gasoline unsettled. No change in kerosene. Prices on some grades of paraffin wax higher. Fair demand for fuel oil and gas oil. Small lot trading in lubricants.

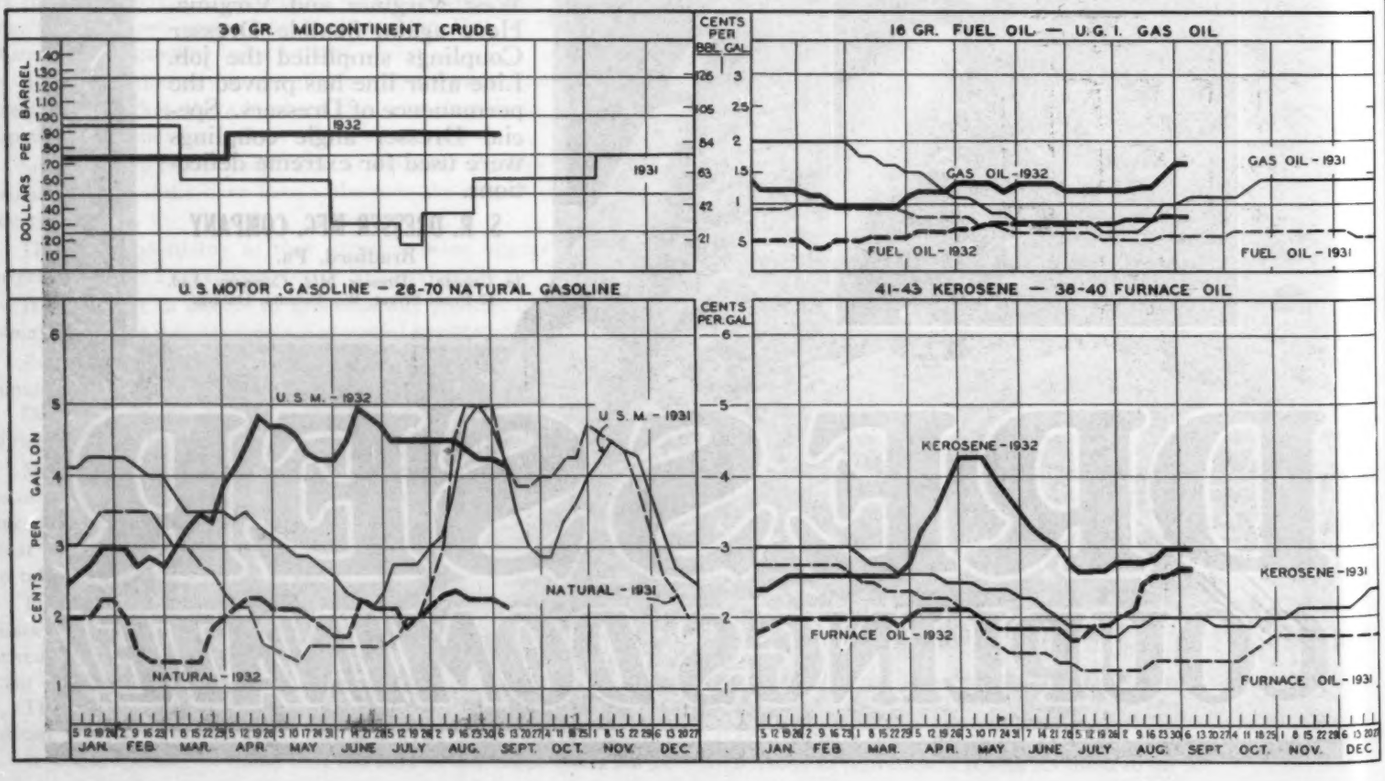
Pennsylvania—General reductions in gasoline, bright stocks, steam refined stocks and several grades of neutral oils. Kerosene quotations lower.

Chicago—Gasoline market unsettled with lower tank car quotations. Strong trend continues in fuel oil, gas oil, distillate and kerosene.

Gulf Coast—Gasoline demand slow. Little activity in pale and red oils.

California—Gasoline market continues weak including natural gasoline. Increased movement of fuel oil and gas oil to East Coast.

Representative Mid-Continent Quotations on Crude Oil and Refined Products Basis Oklahoma (Group 3)


36 GR. MIDCONTINENT CRUDE
DOLLARS PER BARREL
1932
1931
16 GR. FUEL OIL — U.G.I. GAS OIL
CENTS PER BBL GAL
GAS OIL - 1932
GAS OIL - 1931
FUEL OIL - 1932
FUEL OIL - 1931
U.S. MOTOR GASOLINE — 26-70 NATURAL GASOLINE
CENTS PER GALLON
U.S.M. - 1932
U.S.M. - 1931
NATURAL - 1931
NATURAL - 1932
41-43 KEROSENE — 38-40 FURNACE OIL
CENTS PER GAL
KEROSENE - 1932
KEROSENE - 1931
FURNACE OIL - 1932
FURNACE OIL - 1931
JAN. FEB. MAR. APR. MAY JUNE JULY AUG. SEPT. OCT. NOV. DEC.

accounts where conditions have become particularly bad. A graduated scale would be adopted based on volume of business with rebates up to 4 cents off the retail price for large bus, truck and taxicab operators whose business in some cases totals several hundred thousands gallons of gasoline yearly.

It was also thought a 1-cent general reduction in tank wagon and service station schedules might develop as a further corrective measure in the retail markets where price cutting has become too general to be overlooked by several of the major distributors who have business in excess of the actual decline in consumption.

Excess Crude Oil

The situation in regard to the increase in the East Texas allowable crude oil production is explained in articles appearing elsewhere in this issue. It is significant in refined markets for the reason that several of the major buyers have announced that they will only take the 43 bbls. from their connections which means that the producers will have to find other outlets for the additional 7 bbls. per day.

It is feared that these additional 7 bbls. per day will find their way to local refiners and others outside the field at prices substantially under the posted schedules. This would increase the output of several refiners who generally sell at the low of the market and with their lowered crude oil costs they would be in a favorable position in regard to profits. The actual developments in this situation probably will not be as bad as the trade expectation as expressed by representative marketers during the past few days. However, the markets generally, including crude oil, refinery and retail, as established by the major operators have stood about all the unfair competition, including bootlegging and tax evasion of several smaller operators, that they can and unless conditions are changed the price structure, built up at great effort over the past several months, will topple and low prices will prevail in both crude oil and refinery prices through the fall and winter months.

Gasoline and Naphtha

The low octane U. S. Motor gasoline was being sold to the trade the first of the week at a low of 4⅛ cents in Oklahoma. The medium octane grade was available from several sources at a low of 4½ cents and the high octane at 4¾ cents. These prices are one-eighth cent under the prices prevailing a week ago.

Monday was a holiday and it was too early on Tuesday to determine the market trend for the week. New buying, however, was not heavy on Tuesday and should it decline later in the week additional price declines in the tank car market are certain. Several refiners were unable to reduce their stocks adequately during the summer months and they now have excess material. What they will do with these stocks depends largely on developments in the general oil situation. In some cases at least, these refiners will be willing to continue to hold these stocks provided no general slump in oil markets is in prospect.

Some complaint has been heard over the past few days regarding the shipments on contracts. Refiners with contracts during the summer months generally reported satisfactory movement but the outlook for September is not so favorable. Some jobbers have notified their refiner sources of supply that their September requirements will be as much as 25 per cent under August.

A seasonal decline in September under August amounting to approximately 10 per cent is to be expected but for some reason that is not quite clear; many of the pessimists feel that the decline during the coming fall and winter months will be much larger than normal. The optimists endeavor to meet this position with the contention that a resumption of activity due to the generally better feeling in business circles will aid the gasoline demand and conditions this fall and winter will be better relatively than they were during the summer months. They state that resumption of employment will result in motor vehicles of all types being used more, with purchases of new cars on the increase.

Several of the trade report there is an improved spot demand for the higher gravity 390, 375 and 360 endpoint grades in Oklahoma, especially in cases where the sellers can guarantee an octane rating of 60 or better. The prices on actual sales do not indicate any shortage of this material at this time. Naphtha movement is satisfactory although the same price reductions were made as in the regular grades of gasoline.

Natural Gasoline

Reports in natural gasoline circles over the past few days were to the effect that refinery buying would shortly remove some of the weak spots in that market. Refiners have recognized for some time that before their market could be placed on a sound basis, prices on natural gasoline would have to be advanced to the point where they no longer would be a bearish factor based on their blending value and their worth as finished motor fuels.

It is said that additional companies who have been selling their natural gasoline output on the spot market will absorb their output at their own refineries. Other refineries expect to increase their purchases of the blending grades.

The 26-70 grade was sold in Oklahoma and Texas the first of the week at a low of 2⅛ cents. The lower vapor pressure grades were also reduced in prices when any changes were made.

Fuels

No important changes were made in fuel oil, gas oil distillate and kerosene prices during the week. Although more freely offered by sellers, all these products in Oklahoma can be classed as strong.

Lubricants

The recent reductions in bright stocks in Oklahoma and other refining areas are due, according to trade reports, to excessive inventories at a few plants together with a large current output. The Pennsylvania refiners are advocating a drastic curtailment of output during the winter months which is a dull period for the paraffin base stocks. Oklahoma manufacturers reduced their prices when Pennsylvania competition started quoting prices at practically the same levels as prevailed in the Mid-Continent.

Explain Basis for Excise Tax Collections

By CHARLES E. KERN
Washington Bureau, The Oil and Gas Journal

WASHINGTON, D. C., Sept. 3.—A number of examples are cited below in an informal ruling by the Bureau of Internal Revenue of the various conditions under which goods are sold by manufacturers, etc., and a conclusion is indicated with respect to the question of how the tax shall be computed in each case in so far as a transportation or delivery charge is involved. This applies to transactions in the petroleum as well as other industries:

"1. A manufacturer sells goods f.o.b. factory or point of origin. The tax in this case is, of course, on the manufacturer's selling price without reference to any freight charges which may be paid by the purchaser to secure delivery of the goods.

"2. (a) A manufacturer prepays the transportation charges on goods sold. The same charge is made for the goods in all parts of the United States without reference to the amount of transportation charge which may be involved.

"(b) The same situation as above with the exception that the manufacturer makes a higher charge in the case of goods delivered to points west of the Mississippi River.

"In the cases described under (a) and (b) the price upon which the tax is to be computed is that amount which the manufacturer receives for the taxable article less the amount of any transportation charges paid by the manufacturer to effect delivery. In other words, the basic price upon which tax is to be computed is the difference between the amount the manufacturer receives from its customer (or the invoice price) and the cost of effecting transportation and delivery to the customer.

"3. A manufacturer sells taxable merchandise 'freight deductible' or 'freight allowed.' The purchaser at the time of remitting deducts from the amount of the invoice any freight charges he may have paid to secure delivery of the goods from the place of manufacture to the purchaser's place of business.

"The price upon which the tax should be computed in this case is the amount which the purchaser remits after deducting the transportation costs permitted in accordance with the terms of the sales agreement.

"4. A manufacturer located in Bridgeport, Conn., sells goods to a dealer in Kansas City, Mo., f.o.b. Bridgeport, Conn. However, in order to equalize competitive conditions the manufacturer credits the dealer, as an allowance against the invoice price, with an amount equivalent to the difference between the transportation cost from Bridgeport to Kansas City and the transportation cost from Indianapolis, Ind. (the nearest competing point), to Kansas City.

"In this case tax is to be computed upon the invoice price less the amount of the special allowance for the freight differential, where it does not exceed the amount actually paid by the manufacturer as a transportation charge. In other words, the net return to the manufacturer is the basic sales price for purposes of the tax."

American Petroleum Institute Weekly Refinery Statistics

Figures below reported for week by American Petroleum Institute. (1) Per cent refinery capacity represented. (2) Daily average crude runs to stills. (3) Gasoline stocks. (4) Gas oil and fuel oil stocks All figures in 42-gallon barrels.

Week Ending September 3, 1932, Compared to Week Ago

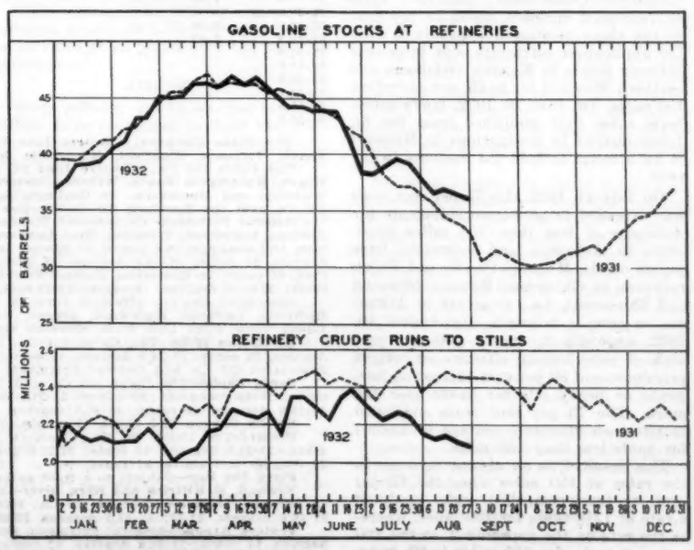
	Week ending August 27			
	(1)	(2)	(3)	(4)
East Coast	100.0	443,900	6,153,000	9,043,000
Appalachian	91.8	89,600	1,329,000	1,011,000
Ind., Ill., Ky.	98.9	277,000	4,722,000	4,358,000
Okla., Kans., Mo.	89.6	230,900	3,209,000	3,483,000
Tex. Gulf	99.8	362,400	4,295,000	9,767,000
La. Gulf	100.0	96,300	97,000	4,242,000
Inland Texas	76.5	95,100	1,191,000	2,120,000
N. La. and Ark.	97.0	42,400	1,471,000	627,000
Rocky Mtn.	89.4	45,400	1,747,000	537,000
California	96.7	421,100	12,450,000	99,737,000
Total U. S.	95.1	2,104,100	36,664,000	134,925,000

A.P.I. report on refinery operations and stocks not available this week on account of Labor Day.

Week Ending September 3, 1932, Compared to Year Ago

	Week ending September 5, 1931			
	(1)	(2)	(3)	(4)
East Coast	100.0	457,200	4,462,000	10,937,000
Appalachian	91.8	100,700	1,171,000	1,472,000
Ind., Ill., Ky.	98.9	350,400	3,640,000	4,570,000
Okla., Kans., Mo.	89.6	287,000	2,439,000	5,060,000
Tex. Gulf	99.8	423,000	4,461,000	8,337,000
La. Gulf	100.0	115,400	574,000	2,119,000
Inland Texas	.....	131,600	1,136,000	3,453,000
La. and Ark.	.....	58,500	167,000	1,035,000
Rocky Mtn.	89.3	45,400	1,268,000	809,000
California	96.5	487,100	11,868,000	97,538,000
Total U. S.	95.0	2,456,300	31,184,000	135,330,000

A.P.I. report on refinery operations and stocks not available this week on account of Labor Day.



Data based on weekly reports of American Petroleum Institute. Figures for week just ended not shown in graph but are included in accompanying table.

Lowering Rail Rates to Meet Truck Competition

(Continued from Page 8)

Texas, commonly referred as blanket rate adjustment. This for the reason that the maximum rate of 39½ cents was reached for a haul of 120 miles over one railroad or a haul of 90 miles over two or more lines. The Texas rates were the result of the famous Shreveport rate case. No uniformity was otherwise maintained in the rates applying interstate between the various southwestern states.

As a result of the chaotic condition of the refined oil rates in the Southwest many complaints were filed with the Interstate Commerce Commission, some as early as 1923 and 1924, so in 1928 the Interstate Commerce Commission, upon petition of the carriers and certain shippers and as a result of the Hoch-Smith resolution passed by Congress, entered into a rate structure investigation, known as docket 17,000, part 4-A, of interstate rates and charges on certain high-grade petroleum products, in carloads, between points in the States of Texas, Oklahoma, Kansas, Arkansas, Louisiana on and west of the Mississippi River, and Missouri on and south of the line of the Chicago, Rock Island & Pacific, from Kansas City through Eldon to Labadie, thence Missouri Pacific to Pacific, thence St. Louis San Francisco to St. Louis, and the relationship between the interstate rates and charges applying on the same products between points in the states named.

The commission rendered its decision January 5, 1931, prescribing a distance scale of maximum reasonable rates on high-grade petroleum products for application interstate and intrastate between points in the Southwest as above prescribed. This basic scale as amended by supplemental decision dated June 2, 1931, known as appendix 2 scale, and recently referred to as the 100 per cent scale, was ordered to become effective within 120 days after July 2, 1931, but on account of the mass of detail involved in checking out the new rates the carriers found it a physical impossibility to comply with the order and filed various petitions for additional time, which was granted.

Due to the fact that the new basis of rates afforded a material reduction in the intrastate rates in Texas, the Texas Commission, upon petition of interested parties, ordered the new basis into effect on Texas intrastate shipments of refined petroleum effective September 10, 1931. On December 15, 1931, the appendix 2 scale was published for application on interstate shipments from points in the Southwest to destinations in Texas.

The rapid increase in the use of trucks for transporting petroleum products caused the carriers to give consideration to establishing rates to meet this competition. On May 26, 1932, the carriers (with authority of state and Interstate Commerce Commission) published rates on petroleum carloads based 75 per cent of the above mentioned appendix 2 scale for application intrastate and interstate between points in Kansas, Oklahoma and southern Missouri for hauls not exceeding 150 miles. On June 10, 1932, lower petroleum rates were published from the St. Louis district to destinations in Missouri in an attempt to hold the business to the rails.

On July 11, 1932, this 75 per cent scale was extended to petroleum shipments for distances of less than 150 miles intrastate in Arkansas and interstate from points on the Missouri Pacific and Frisco railroads in Oklahoma, Kansas, Missouri and Shreveport, La., to points in Arkansas on certain railroads. On August 10, 1932, appendix 2, or the 100 per cent scale of rates became effective on refined petroleum and 80 per cent thereof on low-grade or heavy oils for hauls over 150 miles. The 75 per cent scale continued in effect on interstate (except to Texas) for hauls less than 150 miles.

This resulted in an abrupt increase in the rates at 150 miles since the 75 per cent, or truck-compelled scale, produced a rate of 17½ cents for 150 miles, whereas the rate on the appendix 2, or the 100 per cent scale, for 151 miles is 23 cents. This large hump now occurs in the interstate hauls at 151 miles. However, the carriers, with the permission of the Oklahoma and Kansas Commission, established different rates for intrastate application in Kansas and Oklahoma. The scale applied to Kansas and Oklahoma intrastate was the 75 per cent scale up to 150 miles, then adding 1 cent additional for each 10 miles until the 100 per cent basis is reached, which occurs at 251 miles. The carriers are now considering the establishment of a uniform truck competitive scale for application intrastate and interstate between points in the Southwest except Texas. The law in Texas limiting truck loads to 7,000 pounds has made it practically unnecessary for the carriers to establish truck competitive rates thus far.

RUSSO-JAPANESE NEGOTIATIONS

The Russo-Japanese negotiations for the extension of the Japanese oil concessions in Sakhalin have not yet resulted in final agreement, says the London Oil News. It is stated, however, that discussions are proceeding smoothly and that agreement may be announced almost immediately. By this means a considerable enlargement of the Japanese oil field operations in the northern half of Sakhalin would be rendered possible. On the Russian side, particularly in petroleum circles, there is a feeling against the extension of Japanese operations, principally because it is feared that oil will be drawn from the neighboring Russian properties. However, as up to the present no new market has been found for the output of the Russian Sakhalin fields, the responsible authorities are not greatly influenced by this opinion.

Government Revises Color Test for Imported Oils

NEW YORK, Sept. 3.—For the clarification of the term "pale amber" in the description of the test for carbonizable substances employed in the determination of the tariff status of mineral oils, the acting commissioner of customs has forwarded the following order (T.D. 45,830) to the New York collector of customs:

"The appraiser states that in testing a large number of imported mineral oils by the use of the potassium bichromate solution his office has experienced difficulty with certain oils that are near the border line between the U.S.P. and technical grades, in distinguishing between these grades because of the difference in color and physical appearance between the bichromate solution and the sulphuric acid solution resulting from such tests, and that after experimenting with a number of possible dye or chemical color standards and testing practically all of the available reliable standard brands of liquid petrolatum used solely for intestinal lubrication, as well as numerous samples of imported mineral oil of the same grade, he is of the opinion that T.D. 45,546 should be amended.

"After a careful consideration of the question, the bureau approves the appraiser's suggestion, and the definition of the term 'pale amber' in T.D. 45,546 is amended to read as follows:

"Pale amber as herein defined shall be of the same color as that obtained in the acid layer when 5 cc. of pure liquid petrolatum (free from interfering carbonizable substances) are shaken at room temperature, in a glass-stoppered measuring cylinder of the same capacity and inside diameter as that used in the test, until thoroughly emulsified with 5 cc. of a solution of 0.040 of vat yellow G. F. standard powder (hydron yellow N. F. powder, U. S. Treasury Standard No. 304, T.D. 40,192: Schultz No. 1,286, 1931 edition) in one liter of colorless sulphuric acid (94 per cent as determined by titration) and allowed to stand until two distinct layers separate. The color comparison shall be made by transmitted daylight as soon as the emulsions obtained with both the test and color standard solutions have simultaneously separated into two distinct layers."

MAJ. CHARLES HICKS DIES

NEW YORK, Sept. 3.—Maj. Charles Hicks, a sales executive in the Newark division of Standard Oil Co. of New Jersey, died suddenly yesterday while yachting with friends in Long Island Sound, off New Rochelle, N. Y. He was 49 years old and has been connected with the New Jersey company for the past 20 years. During the World War, Major Hicks served in the A.E.F. with the rank of captain, and for a number of years held an executive position with L'Economique, French marketing subsidiary of Standard Oil Co. (New Jersey).

R. BYLES DIES SUDDENLY

Ralph Byles of the firm of Byles & Wilder, dealers in refined oil products, died at his home in Oil City, Pa., Wednesday, September 28. He was 46 years of age. Since the death of his parents some years ago, Mr. Byles had lived alone in the Byles homestead. When he did not appear at his office, investigation was made and he was found dead in bed.

California Crude Oil Prices

STANDARD OIL CO. OF CALIFORNIA
(Effective June 26, 1932)

For current purchases of crude oil at the well (unless otherwise specified). (All gravities above those quoted take highest price offered in that field.)

Gravity—	Signal Hill (Long Beach)	Seal Beach, Alamitos Heights, Huntington Beach	Inglewood	Playa Del Rey	Olinda-Brea Canyon	Torrance	Richfield	Coyote Hills	Santa Fe Springs	Midway-Sunset, Elk Hills, Buena Vista Hills	Lost Hills	Athens, Rosecrans, Domingues	Montebello	Wheeler Ridge	Coalinga	Whittier-LaHabra
14-14.9	$.65	$.65	$.65	$.65	$.65	$.65	$.65	$ 65	....	$.55	$.55	....	$.65	$.55	$.55	$.55
15-15.9	.65	.65	.65	.65	.65	.65	.65	65	....	.55	.55	....	65	.55	.55	.55
16-16.9	.65	.65	.65	.65	.65	.65	.65	65	....	.55	.55	....	65	.55	.55	.55
17-17.9	.65	.65	.65	.65	.65	.65	.65	65	....	.56	.55	....	65	.55	.55	.55
18-18.9	.65	.65	.65	.65	.65	.65	.65	65	....	.56	.55	....	65	.55	.55	.55
19-19.9	.65	.65	.65	.65	.65	.65	.65	65	....	.56	.55	....	65	.56	.55	.55
20-20.9	.69	.69	.71	.69	.69	.69	.69	.65	....	.59	.59	....	66	.57	.59	.59
21-21.9	.74	.74	.77	.74	.74	.74	.74	66	....	.63	.63	....	67	.60	.62	.73
22-22.9	.79	.79	.82	.78	.79	.79	.79	.70	....	.69	.69	....	.70	.63	.65	.77
23-23.9	.84	.84	.88	.83	.84	.84	.84	76	....	.75	.75	....	.73	.66	.68	.81
24-24.9	.89	.89	.93	.86	.89	.89	.89	81	73	.81	.81	.89	76	.69	.72	.89
25-25.9	.93	.93	....	.91	.93	.93	.93	86	79	.87	.87	.93	.80	.72	.75	....
26-26.9	.97	.97	....	.96	.97	....	....	90	.84	.92	.91	.97	....	....	....	....
27-27.9	1.00	....	....	....	1.00	....	....	.94	.89	.97	.94	1.00	....	....	....	....
28-28.9	1 02	....	....	....	1.02	....	....	98	.94	1.02	.99	1.03	....	....	....	....
29-29.9	1.06	....	....	....	....	....	....	1 02	.98	1.07	1 02	1.06	....	....	....	....
30-30.9	1.09	....	....	....	....	....	....	1 05	1.02	1.12	1.05	1.09	....	....	....	....
31-31.9	....	....	....	....	....	....	....	....	1.06	....	....	1.12	....	....	....	....
32-32.9	....	....	....	....	....	....	....	....	1.10	....	....	1.16	....	....	....	....
33-33.9	....	....	....	....	....	....	....	....	1.14	....	....	....	....	....	....	....
34-34.9	....	....	....	....	....	....	....	....	1.18	....	....	....	....	....	....	....
35-35.9	....	....	....	....	....	....	....	....	1.22	....	....	....	....	....	....	....
36-36.9	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

The Texas Company, effective June 26, posted same prices as the Standard Oil Co. in Signal Hill, Alamitos Heights, Huntington Beach, Torrance, Richfield, Montebello, North Whittier and Santa Fe Springs.

The Union Oil Co., effective June 26, posted the same prices as the Standard Oil Co. in the Signal Hill, Alamitos Heights, Seal Beach, Huntington Beach, Athens, Rosecrans, Domingues, Torrance, Santa Fe Springs, Playa Del Rey, Coyote, Olinda, Brea Canyon, Richfield and Montebello. In Coalinga, Lost Hills, Kern River, McKittrick, Midway-Sunset, Elk Hills and Buena Vista Hills the Union Oil Co. met the Standard Oil Co.'s prices from 14 gravity upward, but posted a price of 50 cents for oil 11 to 13.9 degrees in gravity.

General Petroleum Co. adopted Standard Oil Co.'s prices, effective June 26, in Rosecrans, Signal Hill, Alamitos Heights, Santa Fe Springs, Inglewood, Torrance, Brea Canyon, and Olinda, up to 25.9 degrees; Richfield, Midway-Sunset, Kern River, Poso, Round Mountain, and Coalinga and posted in Rincon as follows: 22-22.9 degrees, 65 cents; 23-23.9 degrees, 73 cents; 24-24.9 degrees, 78 cents; 25-25.9 degrees, 83 cents; 26-26.9 degrees, 86 cents; 27-27.9 degrees, 89 cents; 28-28.9 degrees, 92 cents; 29-29.9 degrees, 95 cents; 30 degrees and over, 98 cents. In Rosecrans, General Petroleum Co. pays 65 cents for 14 to 19.9 gravity oil; 20-20.9 degrees, 69 cents; 21-21.9 degrees, 74 cents; 22-22.9 degrees, 79 cents; 23-23.9 degrees, 84 cents and Standard's prices for oil of higher gravity.

Associated Oil Co., effective June 26, met Standard Oil Co.'s prices in Signal Hill, Huntington Beach, Seal Beach, Alamitos Heights Richfield, Torrance, Inglewood, Athens, Rosecrans, Domingues, Santa Fe Springs, McKittrick, Kern River, Midway Sunset, Elk Hills Buena Vista Hills, Lost Hills, Beiridge and Coalinga.

Kettleman Hills—The Union Oil Co., effective June 26, posted 33-33.9 gravity oil at 91 cents; 34-34.9 degrees, 93 cents; 35-35.9 degrees, 95 cents; 36-36.9 degrees, 97 cents; 37-37.9 degrees, 99 cents; 38-38.9 degrees, $1.01; 39 degrees and over, $1.03, Standard Oil Co. Associated Oil Co. and General Petroleum Co. adopted same price schedule on same day.

Santa Paula—The Union Oil Co. and The Texas Company, effective June 26, posted as follows: 14 degrees to 19.19.9 degrees, 65 cents; 20-20.9 degrees, 69 cents; 21-21.9 degrees, 72 cents; 22-22.9 degrees, 75 cents; 23-23.9 degrees, 78 cents; 24-24.9 degrees, 81 cents 25-25.9 degrees, 84 cents; 26-26.9 degrees, 87 cents; 27-27.9 degrees, 90 cents; 28-28.9 degrees, 93 cents; 29 degrees and above, 99 cents

Shiells Canyon and South Mountain—The Texas Company, effective June 26, posted same prices as in Santa Paula.

Orcutt—The Union Oil Co., effective June 26, posted prices as follows: 16 degrees to 19.9 degrees, 55 cents; 20-20.9 degrees, 59 cents; 21-21.9 degrees, 62 cents; 22.22.9 degrees, 69 cents; 23-23.9 degrees, 75 cents; 24-24.9 degrees, 81 cents; 25-25.9 degrees, 87 cents 26 degrees and above, 92 cents.

Playa Del Rey—Subject to a field gathering charge of 5 cents per barrel.

Newhall, McKittrick and Kern River—Standard Oil Co., effective June 23, 1931, posted 55 cents for oil of all grades.

Elwood Terrace—Standard Oil Co., effective June 26, 1932, posts 33-33.9 degrees, $1.04; 34-34.9 degrees, $1.10; 35-35.9 degrees, $1.16 36-36.9 degrees, $1.22; 37-37.9 degrees, $1.28. All prices f.o.b. ships.

Ventura Avenue—General Petroleum Co. and Associated Oil Co. effective June 26 posted as follows: 22-22.9 degrees, 72 cents; 23-23.9 degrees, 77 cents; 24-24.9 degrees, 82 cents; 25-25.9 degrees, 86 cents; 26-26.9 degrees, 90 cents; 27-27.9 degrees, 93 cents; 28-28.9 degrees 94 cents; 29-29.9 degrees, 99 cents; 30 degrees and over, $1.03.

Potrero—Associated Oil Co., effective June 26, posted same prices as are paid by all companies in Athens, Rosecrans and Domingues

Smaller Motor Fuel Stocks Strengthen Position of East Coast Markets While Exports Lag

By A. E. MOCKLER
New York Bureau, The Oil and Gas Journal

NEW YORK, Sept. 5.—Refinery gasoline markets in the East Coast area, which had been wavering during the previous week, braced somewhat during the past week, under the influence of smaller stocks here and continued withdrawals from storage, and the market went through the week with posted prices unchanged in major marketing centers. Demand showed substantial improvement late in the week, with distributors stocking for the Labor Day week-end holidays. Continued improvement in the statistical position of the market will be required if present price levels are to be maintained much longer, however, and it is expected that the seasonal drop in consumption which should set in shortly will react against maintenance of current refinery quotations. Despite the improved statistical position, therefore, the market undertone at present is still far from stable.

Aside from a few cargoes of East Texas crude for shipment to France, the export market situation remains stagnant. Thus far, there has been no lessening of competition from Rumania or Russia, on the contrary, Soviet marketing operations appear to be steadily expanding in many countries where American exporters have been for many years doing a substantial volume of business. Just how extensively the tariff has impeded export movement from the United States is as yet uncertain, although considerable tonnage of motor fuel which formerly moved out of the Gulf on intercompany shipments abroad is now going from the Caribbean refining area instead. Major refiners in the Caribbean area, however, are not competing extensively with the United States Gulf in open market export business, and the present dearth in gallonage is laid largely to foreign competition and continued curtailed consumption of gasoline and other products in many of the major world markets.

Refinery Gasoline

Refiners continued to post 8 to 8¼ cents per gallon for U. S. Motor gasoline under 65 octane number at refinery terminals here, and while the bulk of the business is reported to be going through at this figure, some offerings have been reported on spot at 7½ to 7¾ cents per gallon. Heavy demand during the week on the part of distributors stocking up for the triple holiday over the Labor Day week-end stimulated the market considerably, but with this business now behind sellers, the outlook for the immediate future is less strong. With the Gulf market reported weakening and a seasonal ebbing in demand in sight, it is believed that the major sellers will be forced to meet the competition of smaller marketers, with a resultant lowering of the posted price schedule.

High octane gasoline continued posted at 8½ to 8¾ cents per gallon in tank car lots, with the inside quotation prevailing on the majority of sales. Price cutting is also reported on the higher grade fuel, with some spot business reported passing at 8 and 8¼ cents in tank car lots here. Production of the higher grade motor fuel is steadily expanding, in proportion to total gasoline output of eastern refineries, and the competitive situation in this field is therefore becoming keener.

Sellers in the Charleston, S. C., market were showing firmer price views during the week. U. S. Motor under 65 octane, which had been available at 7¾ cents per gallon during the previous week, was advanced one-half cent to 8¼ cents, while 65 octane and above, which had been offered by one large seller at 8¼ cents, was up to 8¾ cents on the part of all of the principal sellers in the tank car market.

The cargo of between 50,000 and 60,000 bbls. of Trinidad naphtha which arrived at Bayway early in the week is expected to be the forerunner of additional foreign cargoes which are expected to come in until the tariff provisions of the excise law of 1932 are tightened up. The advent of the Trinidad product on the local market had no perceptible influence on the gasoline situation pricewise.

Tank Wagon Gasoline

A prolonged hot spell throughout the past week made for continued heavy consumption of gasoline, and tank wagon gallonage for the period ran into heavy totals. Business was especially brisk over the week-end, due to holiday demand, and tank wagon delivery departments were operating at capacity to keep retail stations supplied.

Thus far, the weakness in refinery markets has had no repercussions in the tank wagon price structure. Contrary to expectations, most sellers in the metropolitan area have followed in the advance initiated during the preceding week by Standard Oil Co. of New York, and the average retail price is now 7 gallons for $1.10 in many parts of the city, as contrasted with 8, and in extreme instances, 9 gallons for $1 prior to the Socony advance.

Any easing off in refinery markets to the point where posted quotations are lowered, however, is expected to be immediately reflected in tank wagon price schedules on the part of major marketers. A prompt readjustment of this sort, it is felt, will preclude the possibility of price cutting independents getting an early "jump" on the major sellers, with the consequent market demoralization which usually ensues under such circumstances.

East Coast marketers are watching with considerable interest the developments in the quantity discount allowance situation in the Middle West, but no spread of this practice to local territory is indicated for the immediate future.

Considerable marketing of third grades is reported in some sections of the East Coast territory, notably in the southern part of the area, but the local trade has successfully weathered the "summer campaign" without extensive recourse to third grades.

Fuel Oil

Thus far, there has been no appreciable difference in bunker "C" oil volume traceable to the increased prices which became effective about the time the import duty on fuel oil went into effect, and although the differential between bunker oil prices at Atlantic ports and those in the Caribbean area is wider than before the tariff, the difference apparently is not sufficient to justify vessels going out of their way to bunker in the Caribbean.

The posted price for grade "C" oil at principal East Coast ports remains unchanged at 85 cents per barrel at terminals, or 90 cents per barrel f.a.s. within the harbor limits.

A total of 113,000 bbls. of California fuel oil reached New York during the week ended August 27, this constituting the largest week's receipts of fuel oil from the Pacific Coast for some time. California sellers quote 15-19 oil in cargo lots at 50 to 60 cents per barrel, the inside price making an attractive differential under the local posted quotations. Gulf sellers quote bunker oil in cargo lots at 55 to 60 cents per barrel, likewise an attractive differential.

There was a sharp gain in stocks of gas and fuel oil at East Coast refineries during the week ended August 27, total holdings on that date amounting to 9,043,000 bbls., an increase of 536,000 bbls. for the week. This increase developed in the face of a further reduction in refinery operations, plants in this area operating at 70 per cent of capacity during the week, as contrasted with 74 per cent during the preceding week.

Kerosene

Tank car movement of kerosene has held up fairly well throughout the past week, and the market is steady and unchanged at 5½ to 6 cents per gallon for 41-43 water white at terminals. A little shading of the inside price is reported, but sellers in most instances are adhering to 5½ cents per gallon on spot business. More inquiry for later shipments is reaching refiners.

There was no change in the kerosene tank wagon situation during the period under review. Demand was fairly steady, with a satisfactory gallonage moving, and posted prices were unchanged throughout the area.

Paraffin Wax

Firmer price views of refiners have been reflected by a strengthening in the spot position here, and prices were higher on most grades during the week. Spot 120-122 a.m.p. fully refined was quoted at 2½ cents per pound, 130-132 a.m.p. at 3⅝ cents, 133-135 a.m.p. at 4⅛ cents and 135-137 a.m.p. at 4¼ cents, advances of one-eighth cent per pound in each instance. Domestic demand was somewhat improved, and export inquiry likewise picked up during the week.

White crude scale, 122-124 a.m.p., was reported traded at 1.90 cents per pound, an increase of 10 points over the previous quotation.

Gas Oil

With refinery stocks on the increase, sellers have continued to hold the market unchanged at previous price levels, the tank car quotation on spot business on 28 plus recycled oil being 4 cents per gallon.

East Coast refiners will be called upon to meet considerable outside competition in the gas oil market during the winter months, it is indicated, with considerable business on California and Gulf Coast gas oil for shipment to Atlantic ports being reported "in the making." This outside gas oil will be largely used in making deliveries against contracts for furnace oil. California gas oil, of 30-34 gravity, can be bought in the open market on the Pacific Coast at 70 cents per barrel, as contrasted with a price of $1.68 per barrel locally, and gas oil, 28-30, is offered at the Gulf at $1.26 per barrel. With tanker rates at present low levels, gas oil can be profitably moved into East Coast territory from both of these competing refining areas.

Utility companies continue to draw gas oil stocks in but limited volume, but an increase in consumption is looked for later on in the month.

Diesel Oil

Bunkering business is running at levels comparing favorably with 1931 sales totals, it is reported here, and the price advances made a few months ago have not appreciably affected total gallonage. Refiners continue to quote the market at $1.65 per barrel in bulk at terminals and $1.71½ per barrel f.a.s. within the harbor.

Many of the new vessels which have gone into transatlantic service thus far in 1932 are Diesel burners, and the depression in shipping circles has not affected Diesel vessels as drastically as bunker "C" oil burners, and the older type of coal-burning vessel.

Industrial demand for Diesel oil was running into substantial totals during the past week, with refiners continuing to post 4 cents per gallon for 26-32 gravity oil in tank car lots, f.o.b. terminals. Further gains in industrial consumption are looked for during the closing four months of the year, during which period manufacturing operations normally show substantial gains. The Federal tax on sales of electric current, it is reported, has stimulated the use of Diesel power in many industries.

Lubs

Small lot trading continued to feature the cylinder oil market during the week. Domestic buyers were in the market for low cold test oils in fair volume, with some inquiry reaching sellers for oils for delivery over the closing quarter of the year. Export inquiry, however, continued limited on all grades. Prices were without change.

Neutral oils were unchanged in price, with refiners reporting a moderately improved demand. Some of the industrial consumers who stocked up rather heavily prior to the effective date of the 4-cent tax on lub oils have come back into the market, and sellers look for steadily increasing volume from this source over the balance of the year. Increasing activity in manufacturing plants in various lines is also making for a better demand for these oils.

Gulf Export Market

Inquiry for East Texas crude for export furnished the chief interest in this branch of the business last week. A cargo of approximately 9,000 tons was reported closed for September shipment to France at $1.10 per barrel, f.o.b. Gulf. Additional inquiries were reported coming into the market, with buyers looking for distressed stocks.

No cargo business in either gasoline or kerosene developed at the Gulf during the week, and no new inquiries materialized. Prices remained nominally unchanged on both products, although it was believed that the posted price of 5 cents per gallon for 64-66 375 endpoint, might have been shaded fractionally on a firm bid. With European buyers getting both high octane and low price in their purchases from Rumania, the outlook for increasing gasoline activity in the Gulf export market is not optimistic at this writing.

There was no trading reported in either Venezuelan or Mexican crude during the week, with quotations reported unchanged at both points.

Petroleum Exports

Routine activity was again reported in the local export market during the

(Continued on Page 42)

REFINERY AND CRUDE PRICES

Quotations on refined products are for interstate or export movement except as otherwise noted

EXCLUSIVE OF TAXES

The following quotations are exclusive of the Federal excise taxes of 1 cent a gallon on gasoline and 4 cents on lubricating oils, which became effective June 21.

Gasolines

	Sept. 6		Aug. 30	
OKLAHOMA (Group 3)—				
*U. S. Motor	.04¼	.04½	.04¼	.04⅝
60-62 400	.04½	.04⅝	.04⅝	.04¾
64-66 390	.04½	.04¾	.04⅝	.05
64-66 375	.04⅝	.04¾	.04⅝	.05¼
68-70 350	.04¾	.05	.04⅞	.05¼
NORTH TEXAS—				
*U. S. Motor	.04¼	.04¼	.04¼	.04½
60-62 400	.04¼	.04⅜	.04⅜	.04⅝
64-66 390	.04⅜	.04⅝	.04½	.04¾
64-66 375	.04½	.04⅝	.04⅝	.04⅞
64-66 360	.04⅝	.04¾	.04¾	.05
†NORTH LOUISIANA—				
*U. S. Motor	.04½		.04¾	
60-62 400	.04¾		.05	
†ARKANSAS—				
*U. S. Motor	.04½		.04¾	
CHICAGO Based on Okla. (Group 3)—				
*U. S. Motor	.04¼	.04¼	.04¼	.04⅜
60-62 400	.04¼	.04⅜	.04⅜	.04⅝
64-66 375	.04¾	.05	.04¾	.05
Aviation fighting grade	.05	.05¼	.05	.05¼
68-70 360	.04⅞		.05	.05⅛

Octane Ratings—Above quotations cover price ranges on gasoline in which no octane rating is given. On September 6, in the case of the U. S. Motor and 60-62 400 endpoint grades, where an octane rating of 57-65, inclusive, is guaranteed, prices are three-eighths cent per gallon higher than quotations show in above tables; where an octane rating of better than 65 is guaranteed, the prices are five-eighths cent higher. In the case of the remaining grades, gasolines of 65 octane rating or higher are quoted one-half cent higher than the quotations shown in above tables.

Unless otherwise provided by agreement of buyers and sellers, the Series 30 testing equipment of the Ethyl Gasoline Corp. is recognized as standard in determining octane ratings.

*Present distillation specifications on U. S. Motor gasoline are: 10 per cent evaporated, 167° F. maximum; 50 per cent, 284° F. maximum; 90 per cent, 392° F. maximum; residue not exceeding 2 per cent; maximum vapor pressure, 12 pounds. Additional specification on U. S. Motor gasoline available from bulletins of Bureau of Mines, Washington, D. C.

†For Arkansas, Louisiana and Mississippi delivery.

PENNSYLVANIA (inland refineries)—				
U. S. Motor	.06½	.06¾	.06¾	.07
60-62 400	.06¾		.07	
64-66 375	.07		.07¼	
68-70 350	.07	.07¼	.07¼	.07⅜

Octane Ratings—In the case of U. S. Motor and 60-62 400 endpoint grades, same price differentials based on octane ratings as shown in above tables for Oklahoma and other Mid-Continent areas:

CALIFORNIA (domestic movement only)—				
54-58 U. S. Motor	.05½	.06	.05½	.06½
58-60 400	.06	.06¾	.06	.06¾
EAST COAST—				
U. S. Motor, below 65 octane:				
New York (Bayonne)	.08	.08¼	.08	.08¼
Boston	.08¼		.08¼	
Baltimore, Md.	.08¼		.08¼	
Charleston, S. C.	.08¼		.07¾	.08¼
U. S. Motor, 65 octane and above:				
New York (Bayonne)	.08½	.08¾	.08½	.08¾
Boston	.08¾		.08¾	
Baltimore, Md.	.08¾		.08½	.08¾
Charleston, S. C.	.08¾		.08¼	.08¾
GULF COAST (domestic)—				
U. S. Motor, 65 octane and above	.05½	.05¾	.05½	.05¾
U. S. Motor, below 65 octane number	.05¼	.05½	.05¼	.05½

Naphthas

	Sept. 6		Aug. 30	
OKLAHOMA (Group 3)—				
50-52 450 (blending)	.04¼	.04½	.04⅜	.04⅝
PENNSYLVANIA (inland refineries)—				
50-54 430-450 (blending)	.06½	.06⅝	.06½	.06¾
ARKANSAS—				
48-50 450 (blending)	.04⅜	.04¾	.04⅜	.05
CHICAGO Based on Okla. (Group 3)—				
50-52 450 (blending)	.04¼	.04½	.04⅜	.04⅝
Cleaners' naphtha, 56-58 gr. 200 i.b.p.-320 e.p.	.06¼	.06½	.06¼	.06½
Lacquer diluent, 180 i.b.p.-250 e.p.	.07½	.07¾	.08⅜	.08⅝
Lacquer diluent, 140 i.b.p.-200 e.p.	.08½	.09	.08¾	.09
Rubber solvent, 68-70 gr. 100 i.b.p.-300 e.p.	.06	.06¼	.06¼	.06½
Stoddard solvent, 300 i.b.p.-410 e.p. over 100° flash	.05¾	.06	.05½	.05¾
Pet. thinner, 290, 300 i.b.p.-415 e.p., over 83° flash	.05	.05¼	.05¼	.05½
V.M.&P. naphtha, 56-58 gr., 190-200 i.b.p.-330 e.p.	.06	.06¼	.06	.06¼
Petroleum spirits	.04	.05¼	.04⅛	.05¼

Natural Gasolines

	Sept. 6		Aug. 30	
OKLAHOMA (Group 3)—				
Grade 18-55	.02¾		.02¾	
Grade 26-70	.02⅛	.02¼	.02¼	
Grade 30-70	.02⅛		.02⅛	
*Low vapor pressure grades:				
15 lb. v.p. (max.)	.03		.03	
11 lb. v.p. (max.)	.03¾	.04	.03¾	.04
NORTH TEXAS—				
Grade 18-55	.02⅝	.02¾	.02⅝	.02¾
Grade 26-70	.02½	.02¼	.02¼	
Grade 30-70	.02⅛		.02⅛	
*Low vapor pressure grades:				
15 lb. v.p. (max.)	.02⅞	.03	.03	
11 lb. v.p. (max.)	.03¾		.03¾	
NORTH LOUISIANA—				
Grade 26-70	.02⅜		.02½	
CALIFORNIA—				
75-78 375	.04¼	.05¼	.04¼	.05¼

Note—Grades 18-55, 26-70 and 30-70 are three of 24 grades adopted by the Natural Gasoline Association of America effective January 1. The grades are based on pounds vapor pressure and amount evaporated at 140° F. While not exactly the same specifications apply, Grade 18-55 corresponds to the former Grade A, Grade 26-70 to former Grade AA and Grade 30-70 to former Grade BB.

*All grades have minimum recovery of 96 (natural gasoline method).

Kerosenes

(All kerosenes water white)

	Sept. 6		Aug. 30	
OKLAHOMA (Group 3)—				
41-43	.03	.03½	.03	.03½
42-44	.03⅛	.03¼	.03⅛	.03¼
NORTH TEXAS—				
40-41	.02¾	.02⅞	.02¾	
41-43	.02⅞	.03⅛	.02⅞	.03
†NORTH LOUISIANA—				
41-43	.03½		.03½	
42-44	.03¾		.03¾	
†ARKANSAS—				
41-43	.03½		.03½	
PENNSYLVANIA (inland refineries)—				
45	.04½		.04⅝	
46	.04¾		.04½	
47	.04⅞		.04⅞	
CHICAGO (Based on Group 3)—				
41-43	.03	.03¼	.03	.03¼
42-44	.03¼		.03⅜	
*CALIFORNIA—				
38-40 high burning test	.04	.04¾	.04	.04¾
NEW YORK (Bayonne, N. J.)—				
41-43	.05½	.06	.05½	.06
GULF COAST (domestic)—				
41-43 water white	.04¼	.04½	.04¼	.04½

*For Pacific Coast consumption.

†For Arkansas, Louisiana and Mississippi delivery.

Tractor Fuels*

	Sept. 6		Aug. 30	
OKLAHOMA (Group 3)—				
39-40 prime white	.02¾	.03	.02¾	.03
38-40 light straw	.02⅝	.02¾	.02⅝	.02¾
NORTH TEXAS—				
38-40 light straw	.02⅝		.02⅝	
CHICAGO (Based on Group 3)—				
38-40 light straw	.02⅞	.03	.02⅞	.03
PENNSYLVANIA (inland refineries)—				
41-43 prime white	.04¼		.04¼	

*There are no standard specifications for tractor fuels. Grades commonly sold have flash under 175° F. (open cup) and under 575° F. endpoint and less than .2 per cent sulphur. Tractor fuels are available from all Mid-Continent refining groups at prices in line with the Oklahoma market taking into consideration differentials in freight rates.

Furnace Oils*

	Sept. 6		Aug. 30	
OKLAHOMA (Group 3)—				
32-36 straw	.02⅜	.02½	.02¾	.02½
36-38 straw	.02⅝	.02¾	.02⅝	.02⅝
38-40 straw	.02¾	.02⅞	.02¾	.02⅞
39-41 prime	.02¾	.03	.02⅞	.03
NORTH TEXAS—				
38-40 straw	.02¾		.02¾	
†NORTH LOUISIANA—				
36-40	.03	.03⅛	.03	
†ARKANSAS—				
32-36	.03		.03	
CHICAGO (Based on Group 3)—				
32-36 straw	.02½	.02⅝	.02½	.02⅝
38-40 straw	.02⅞	.03	.02⅞	.03
PENNSYLVANIA (inland refineries)—				
40-41 prime white	.03½		.03½	
NEW YORK (Bayonne, N. J.)—				
32-36	.04½		.04½	
36-40	.04½		.04½	
21 (industrial)	.04		.04	

*Above prices are for furnace oils of zero cold test under 190° F. flash and good odor.

†For Arkansas, Louisiana and Mississippi delivery.

Gas Oil, Diesel Oil and Fuel Oil

Gas oil (G.O.) quoted per gallon basis; Diesel oil and fuel oil per barrel.

	Sept. 6		Aug. 30	
OKLAHOMA (Group 3)—				
32-36 (G.O.) cracking stock	.01⅝	.01¾	.01⅝	.01¾
U.G.I. (G.O.)	.01⅝		.01⅝	
32-36 zero to 15 (G.O.) high flash	.01¾	.02	.01¾	.02
28-30, zero to 10	.75		.75	
26-30, zero to 10	.70		.70	
24-26	.47½	.55	.47½	.52½
20-22	.45	.50	.42½	.47½
16-20	.40	.45	.40	.45
Below 16	.37½	.40	.37½	.40
NORTH TEXAS—				
32-36 (G.O.) industrial	.01½		.01½	
22-26	.45	.50	.45	.50
Below 20	.40	.45	.40	.45
NORTH LOUISIANA—				
32-36 (G.O.) zero	.02¼		.02	.02⅛
14-16	.35	.40	.35	.40
†ARKANSAS—				
32-36 (G.O.) zero high flash	.02¼		.02¼	
14-16	.35	.40	.35	.40
CHICAGO (Based on Group 3)—				
32-36 (G.O.) industrial	.01⅝	.01¾	.01⅝	.01¾
28-30 (zero)	.77½	.82½	.75	.80
22-26	.55	.60	.55	.60
18-22	.45	.50	.42½	.47½
Below 18	.30	.35	.30	.35
PENNSYLVANIA (inland refineries)—				
36-40	.03¼		.03	.03¼

Note—Fuel oils of more than 40 cold test generally 5 to 10 cents per barrel less in all areas than shown in above tables.

†For Arkansas, Louisiana and Mississippi delivery.

CALIFORNIA—				
30-34 (G.O.) per bbl.	.70	.85	.70	.85
27 plus Diesel	.70	.85	.70	.85
15-19 bunker (at tidewater)	.55	.65	.55	.65
15-19 (cargo lots)	.50	.60	.50	.60
15-19 (tank car)	.40	.60	.40	.60
GULF COAST—				
28-30 (G.O.)	.03	.03⅛	.03	.03⅛
28-30 Diesel	1.50		1.50	
Bunker C (bulk cargoes)	.55	.60	.55	.60
Bunker C (bunkers)	.70		.70	
NEW YORK (Bayonne, N. J.)—				
28 plus (G.O.)	.04		.04	
*28-30 Diesel	1.65		1.65	
26-32 Diesel (tank cars)	.04		.04	
†Bunker C	.85		.85	

*Lighterage 6½ cents per barrel.

†Lighterage 5 cents per barrel.

Petroleum Coke*

Prices per ton f.o.b. refineries in Chicago area.

Breeze (screenings)	3.75	4.00	3.75	4.00
Still runs	4.00	4.25	4.00	4.25
Lump and egg	5.50	6.25	5.50	6.25

*Refineries will absorb freight to 80 cents a ton.

Neutral Oils

(Viscosity at 100° F. and color)

	Sept. 6		Aug. 30	
OKLAHOMA (Group 3)—				
Zero to 10 Cold Test:				
150-3	.06¼	.06½	.06¼	.06½
180-3	.07½	.07¾	.07½	.07¾
180-4	.07	.07¼	.07	.07¼
200-3	.08¼	.08½	.08¼	.08½
200-4	.08	.08¼	.08	.08¼
240-3	.09¾	.10	.09¾	.10
240-4	.09¼	.09½	.09¼	.09½
280-3	.11¼	.11½	.11¼	.11½
280-4	.10¼	.10½	.10¼	.10½
300-3.5	.11¾	.12	.11¾	.12
350-3.5	.12¼	.12½	.12¼	.12½
400-4	.12¾	.13	.12¾	.13
500-4.5	.13¼	.13½	.13¼	.13½
100-2 paraffin oil	.04¼	.04½	.04¼	.04½
15-30 Cold Test:				
200-3	.07¾	.08	.07¾	.08
200-4	.07½	.07¾	.07½	.07¾

240-3	.09¼	.09½	.09¼	.09½
240-4	.08¾	.09	.08¾	.09
280-3	.10¾	.11	.10¾	.11
280-4	.09¾	.10	.09¾	.10
PENNSYLVANIA—				
150 vis., No. 3, 400-405:				
Zero pour test	.14	.15	.14	.15
10 pour test	.13	.14	.13	.14
15 pour test	.12½	.13	.13½	.14½
25 pour test	.11½	.12	.12¾	.13¼
30 pour test	.11½	.12	.11	.12
180 vis., No. 3, 25 pour test	.14	.15	.15½	.16
200 vis. No. 3:				
Zero pour test	.20	.22	.21	.22
10 pour test	.18	.20	.19	.20
15 pour test	.17	.18	.17½	.18
25 pour test	.16	.17	.16½	.17
30 pour test	.16	.16½	.16¼	.16¾
GULF COAST—				
Pale Oils:				
100-2-2½	.05		.05	
200-3	.06½		.06½	
300-3	.07		.07	
500-3½	.08	.08½	.08	.08½
750-3½	.09	.09½	.09	.09½
1,200-3½	.10½	.11	.10½	.11
2,000-4	.12	.12½	.12	.12½
Red Oils:				
200-5-6	.05	.05½	.05	.05½
300-5-6	.05½	.06	.05½	.06
500-5-6	.06¾	.07	.06¾	.07
1,200-5-6	.09½	.10	.09½	.10
2,000-6 plus	.11	.11½	.11	11.½
CALIFORNIA—				
Pale Oils:				
100-2½-3	.07¾	.08	.07¾	.08
200-2½-3	.07¾	.08	.07¾	.08
300-3-3½	.08¼	.08½	.08¼	.08½
350-3-4	.08¾	.09	.08¾	.09
400-3-4	.09¼	.09¾	.09¼	.09¾
450-3-4	.09¾	.10	.09¾	.10
550-3-4	.10¼	.11	.10¼	.11
Red Oils:				
200-4½-5	.07	.07¼	.07	.07¼
300-5-6	.07½	.07¾	.07½	.07¾
350-5-6	.07¾	.08	.07¾	.08
400-5-6	.08	.08¼	.08	.08¼
450-5-6	.08¼	.08½	.08¼	.08½
500-5-6	.08½	.08¾	.08½	.08¾
600-5-6½	.08¾	.09	.08¾	.09
700-6½ plus	.09	.09¼	.09	.09¼
750-6½ plus	.09	.09½	.09	.09½
900-6½ plus	.12	.13½	.12	.13½

Bright and Steam Refined Stocks

OKLAHOMA (Group 3)—	Sept. 6		Aug. 30	
630 light green	.07¾	.08	.07¾	.08
600 light green S.R.	.05	.06	.05	.06
600 dark green S.R.	.04	.04½	.04	.04½
Bright Stock:				
190-200 D	.19		.21	
150-160 D, 0-10	.18		.20	
150-160 D, 10-25	.17½		.19½	
150-160 D, 25-40	.17		.19	
150-160 E	.17		.19	
PENNSYLVANIA—				
600 S.R.	.13½	.13¾	.13½	.14
650 S.R.	.16¼	.16¾	.17	.17½
600 Pennsylvania flash	.17¼	.17¾	.18	.18½
600 D filtered	.22	.22½	.22½	.23
600 E filtered	.16¼	.16½	.16¾	.17
Pennsylvania Grade bright stock:				
Bright Stock, No. 8 color, 145-50 vis.				
210-540-550 flash:				
10 pour test	.26	.28	.27	.29
15 pour test	.24	.26	.26	.26½
25 pour test	.22		.23	
35 pour test	.21½		.23	

Wax and Petrolatum

(Prices per pound)

OKLAHOMA (Group 3)—	Sept. 6		Aug. 30	
124-126 white crude scale	.01⅝	.01¾	.01⅝	.01¾
PENNSYLVANIA—				
122-124	.01⅞		.01⅞	
124-126	.02		.02	
NEW YORK (Bayonne, N. J.)—				
Refined Wax:				
120-122	.02½		.02⅝	
125-127	.02⅞		.02⅞	
130-132	.03⅜		.03¼	
133-135	.04⅛		.04	
135-137	.04½		.04⅛	
Petrolatum in barrels in carload lots:				
Dark green	.01¾		.01¾	
Amber	.02⅛		.02⅛	
Extra amber	.02½		.02½	
Cream	.04⅝		.04⅝	
Lily white	.05½		.05½	
Snow white	.06½		.06½	

Export Prices

GASOLINE

GULF COAST—	Sept. 6	Aug. 30
U. S. Motor	.04½	.04½
60-62 400	.04⅝	.04⅝
61-63 390	.04¾	.04¾
64-66 375	.05	.05

LOS ANGELES, CALIF.—				
U. S. Motor, 53-55, 437 e.p.	.03¾	.04¼	.03¾	.04¼
U. S. Motor, 65 octane num.	.05		.05	
U. S. Motor, 67 octane num.	.05¼		.05¼	
U. S. Motor, 69 octane num.	.05½		.05½	
58-60 400 endpoint gasoline	.04¼	.05	.04¼	.05

KEROSENE

GULF COAST—				
41-43 prime white	.04⅜		.04⅜	
41 water white	.04½		.04½	
LOS ANGELES, CALIF.—				
41-43 water white	.03¾	.04½	.04	.05

LUBRICANTS

NEW YORK (Bayonne, N. J.)—				
600, steam refined cylinder stocks, in bbls.	.21	.22	.21	.22
650, steam refined	.24	.25	.24	.25
600, Pennsylvania flash	.24½	.25	.24½	.25
630, Pennsylvania flash	.29	.30	.29	.30
600, Warren E	.23½	.24	.23½	.24
600, Oil City E	.22½	.23	.22½	.23
Light 140-150 bright stocks	.32	.33	.32	.33
Dark 140-150 bright stocks	.30	.31	.30	.31
NEW YORK (f.a.s) (in bbls.)—				
600 filtered	.20½	.21	.20½	.21
600 Warren E	.23	.23½	.23	.23½
600 S.R. unfiltered	.20	.21	.20	.21
650 S.R. unfiltered	.23	.24	.23	.24
600 flash S.R.	.24	.25	.24	.25
630 flash S.R.	.29	.30	.29	.30
Bright stock, No. 8 color	.31	.33	.31	.33
Bright stock, No. 6½ color, dil.	.29	.31	.29	.31

NEUTRAL OILS

NEW YORK—Pale Engine Oil, Bulk (vis. at 100):				
230-33¾	.10	.10¼	.10	.10¼
180-31¼	.09½	.09¾	.09½	.09¾
100-24¼	.05½	.06	.05½	.06
Red Engine Oil, Bulk (vis. at 100):				
300-6½	.09½	.09¾	.09½	.09¾
250-6	.09	.09¼	.09	.09¼
200-6	.08¼	.08½	.08¼	.08½

Crude Oil Prices

Oklahoma, Kansas, North and East Central Texas

East Texas (Apr. 1, 1932)†	$ .98
East Texas (April 11, 1932)‡	.95
Corsicana heavy*	.64
Other fields	See gravity table

†Posted by Magnolia Petroleum Co., Sinclair Refining Co., Panola Pipe Line Co., Tidal Refining Co. and The Texas Company. ‡Gulf Pipe Line Co. and Atlas Pipe Line Co. *Magnolia Petroleum Co.

Eastern States

JOSEPH SEEP PURCHASING AGENCY
(Effective April 25, 1932)

Pennsylvania Grade Oil in National Transit Lines (Bradford Field) (Mar. 14, 1932)	$2.02
Pennsylvania Grade Oil in Southwest Pennsylvania Lines (Aug. 11, 1932)	1.72
Penna Grade Oil in Eureka Pipe Line Lines (Aug. 11, 1932)	1.67
Penna Grade Oil in Buckeye Pipe Line Lines (Aug. 11, 1932)	1.52
Corning Grade Oil in Buckeye Pipe Line Co.'s line (Apr. 25, 1932)	1.05
Ragland Grade Oil in Cumberland Pipe Lines (Kentucky) (Jan. 16, 1931)	.60

PENNZOIL CO.
(Effective April 25, 1932)

Pennsylvania Grade Oil in National Transit Lines:	
Group A. Includes Cochran, Franklin, Hamilton and Deolittle districts.	$1.97
Group B. Includes Titusville district.	1.96
Group C. Includes Turkey and Tidiout districts.	1.95
Group D. Includes Bear Creek and Porkey districts.	1.94
Group E. Includes Eidenau, Bull Creek, Rough Run, Carbon, Dipner, Bredin, McJunkin, Jameson, Kennerdell, Emienton, Tiona, Lacy and Kinzua districts.	1.93
Price depends on length of pipe line haul to plant at Oil City.	

TIDE WATER PIPE CO.
(Effective April 20, 1932)

Bradford, Pa.	$2.02
Allegany, N. Y.	2.02

PURE OIL CO.
(Effective August 11, 1932)

Cabin Creek, W. Va.	$1.67
Bradford Hollow, W. Va.	1.67
Kelly's Creek, W. Va.	1.67

Texas Panhandle

Gray County, Wheeler County and Carson-Hutchinson Counties....See gravity table

Rocky Mountain States

OHIO OIL CO.-MIDWEST REFINING CO.

Ilea, light (Aug. 24, 1931)	$ .75
Ilea, heavy (Aug. 24, 1931)	.53
Fort Collins (April 11, 1932)	.86
Florence (April 11, 1932)	.80
Wellington (April 11, 1932)	.76
Greasewood Dome, Colo. (Apr. 11, 1932)	1.00
Dutton Creek (Apr. 11, 1932)	.82
Rock Creek, Wyo. (June 1, 1932)	.90
Frannie, light (Nov. 3, 1931)	.61
Frannie, heavy (Nov. 3, 1931)	.51
Salt Creek	Mid-Continent gravity table
LaBarge	Mid-Continent gravity scale
Big Muddy (Apr. 11, 1932)	.98
Grass Creek (June 1, 1932)	1.10
Elk Basin (June 1, 1932)	1.10
Lance Creek (Apr. 11, 1932)	1.15
Poison Spider (Mar. 5, 1931)	.70
Notches (Mar. 14, 1927)	.65
Hudson (June 2, 1931)	.65
Lander (Mar. 5, 1931)	.40
Rex Lake (Feb. 22, 1930)	1.10
Osage (Apr. 15, 1931)	.98
Lost Soldier (Apr. 12, 1932)	.80
Hamilton Dome (Nov. 3, 1931)	.45
Greybull (Apr. 11, 1932)	1.20
Cat Creek (Apr. 11, 1932)	1.20
Pondera (Nov. 3, 1931)	.90
Sunburst, Mont. (Apr. 11, 1932)	1.05
Hogback, N. Mex. (Aug. 24, 1931)	.50
Border, Mont.	1.55
Red Coulee, Alberta	1.55
Lea County, N. Mex. (Apr. 1, 1932)*	.65
Maljamar (Apr. 11, 1932)	.60
Artesia-Jackson (Apr. 11, 1932)	.65

Note—Salt Creek, Cat Creek, Dry Creek, Dallas-Derby, Hudson, Greybull, Hogback, and Ilea by Midwest Refining Co. and remainder by Ohio Oil Co. Both companies posted Grass Creek light and Elk Basin. Lost Soldier posted by Producers & Refiners Corp. Artesia, Jackson and Maljamar posted by Continental Oil Co. Border and Red Coulee posted by Imperial Refining Co. Lea County posted by Humble Oil & Refining Co. Fort Collins, Wellington, Orchard, Florence, Rattlesnake and Table Mesa by Continental Oil Co. Osage posted by Arro Oil & Refining Co.

*Posted by The Texas Company. Humble Oil & Refining Co. met this price effective April 11.

West Texas

Iatan and Westbrook	Same as North Texas
Crane, Upton, Crockett, Howard, Glasscock, Mitchell, Ector, Winkler and Pecos Counties*	$ .65
Lea County, N. Mex. (See Rocky Mountain States.)	
Toborg, Pecos County (Apr. 11, 1932)†..	.55

*Effective April 1, 1932, Magnolia Petroleum Co., The Texas Company. Effective April 11, Humble Oil & Refining Co. and Gulf Pipe Line Co. and Stanolind Oil & Gas Co. in Winkler County. †Sheil Petroleum Corp.

Gulf Coast

Grade A and Grade B classifications discontinued by leading buyers.....See gravity table

Jennings, La. (Apr. 11, 1932)*	$ .75
Lockport, La.	See Gulf Coast gravity table
Refugio, light	See gravity table
Refugio, heavy (Apr. 11, 1932)‡	.80
Markham (Apr. 11, 1932)§	See Gulf Coast gravity schedule
High Island (Apr. 11, 1932)¶	See Gulf Coast gravity schedule

*Gulf Refining Co. †Magnolia Petroleum

(Continued on Next Page)

Crude Oil Gravity Table

	Kansas and Oklahoma	North and Central Texas	East Central Texas	Gray County, Texas	Carson and Hutchinson Counties, Texas	Salt Creek and LaBarge, Wyoming	North Louisiana and Arkansas	Gulf Coast (Texas-Louisiana)	Cameron, Meadows Louisiana	Iowa and Lockport, Louisiana
	1	2	3	4	5	6	7	8	9	10
Below 25 degrees	....	....	$.67	....	....	....	$.68	$.80	$.70	$.80
25-25.9 degrees	....	....	.67	....	....	....	.70	.81	.71	.81
26-26.9 degrees	....	....	.67	....	....	....	.72	.82	.72	.82
27-27.9 degrees	....	....	.67	....	....	....	.74	.83	.73	.83
28-28.9 degrees	....	....	.76	....	....	....	.76	.84	.74	.84
Below 29 degrees	$.76	$.76	....	....	....	$.76	....	....	....	....
29-29.9 degrees	.78	.78	.78	....	....	.78	.78	.85	.76	.85
30-30.9 degrees	.80	.80	.80	....	....	.80	.80	.86	.78	.86
31-31.9 degrees	.82	.82	.82	....	....	.82	.82	.87	.77	.87
32-32.9 degrees	.84	.84	.84	....	....	.84	.84	.88	.78	.88
33-33.9 degrees	.86	.86	.86	....	....	.86	.86	.89	.79	.88
34-34.9 degrees	.88	.88	.88	$.76	$.66	.88	.88	.90	.80	.90
35-35.9 degrees	.90	.90	.90	.78	.68	.90	.90	.91	.81	.91
36-36.9 degrees	.92	.92	.92	.80	.70	.92	.92	.92	.82	.92
37-37.9 degrees	.94	.94	.94	.82	.72	.94	.94	.94	.84	.94
38-38.9 degrees	.96	.96	.96	.84	.74	.94	.96	.96	.86	.96
39-39.9 degrees	.98	.98	.98	.86	.76	.94	.98	.98	.88	.98
40 degrees and over.	1.00	1.00	1.00	.88	.78	.94	1.00	1.00	.90	1.00

Note—Magnolia Petroleum Co.'s prices in Oklahoma, North Texas and Central Texas effective April 1, are the same as above given in Columns 1 and 2, excepting that the schedule begins with below 28 degrees, 67 cents; 28-28.9 degrees, 76 cents. The Empire Pipe Line Co. met the Magnolia prices in Kansas and Oklahoma; the White Eagle Oil Corp. in Kansas and the Pure Oil Co., in Oklahoma.

Column 1—Effective April 1, 1932, Continental Oil Co. in Oklahoma and Kansas; Barnsdall Refineries, Inc., and Standish Oil Co. (Phillips Petroleum Co.), in Oklahoma and Kansas; Skelly Oil Co., Kanotex Refining Co., Derby Oil Co., Vickers Petroleum Co., in Kansas; Magnolia Petroleum Co. and Pure Oil Co., in Oklahoma (see note above); White Eagle Oil Corp., in Kansas (see note above); The Texas Company in Oklahoma. Effective April 11, 1932, Stanolind Crude Oil Purchasing Co. in Oklahoma and Kansas; Gypsy Oil Co., Mid-Continent Petroleum Corp., Champlin Refining Co., Eason Oil Co., Pepper Gasoline Co. and Carter Oil Co. in Oklahoma. Carter Oil Co.'s schedule begins at below 25 degrees 68 cents, with 2 cents added for each degree upward.

Column 2—Continental Oil Co., effective April 1, in North Texas only; followed on same day by The Texas Company in North and Central Texas; Magnolia Petroleum Co. in North and Central Texas (see note above); effective April 11, the Humble Oil & Refining Co., Gulf Pipe Line Co. and Stanolind Crude Oil Purchasing Co.

Column 3—Effective April 1, 1932, the Magnolia Petroleum Co., effective April 11, 1932. Humble Oil & Refining Co.

Column 4—Effective April 1, 1932, Magnolia Petroleum Co., effective April 2, the Philtex Oil Co. (Phillips Petroleum Co.), but its schedule was carried down to below 30 degrees at 66 cents, with 2 cents added for each degree upward. Effective April 11, other companies met Continental schedule.

Column 5—Effective April 1, 1932, Magnolia Petroleum Co., effective April 2, Philtex Oil Co., excepting that latter company carried its schedule down to below 30 degrees at 56 cents, with 2 cents added for each degree upward. Effective April 11, Continental Oil Co. and Gulf Pipe Line Co. met Magnolia Petroleum Co. prices.

Column 6—Midwest Refining Co., effective April 11, 1932.

Column 7—The Texas Company, effective April 1, 1932; Magnolia Petroleum Co., effective April 6, 1932; Standard Oil Co. of Louisiana, Louisiana Oil Refining Co., Stanolind Oil & Gas Co. (in Pine Island and Pleasant Hill and in Marion County, Texas) and Gulf Refining Co., effective April 11, 1932.

Column 8—The Texas Company, effective April 1, 1932; Sun Oil Co., April 1, 1932. Humble Oil & Refining Co., effective April 11, 1932; Gulf Pipe Line Co., effective April 11, 1932. Gulf's gravity scale ends with a top of 35 and above at 91 cents. Humble Oil & Refining Co., effective July 18, 1932, posted following prices for Conroe crude: 35-35.9 degrees, 90 cents; 36-36.9 degrees, 92 cents; 37-37.9 degrees, 94 cents; 38-38.9 degrees, 96 cents; 39-39.9 degrees, 98 cents; 40 and above, $1.

Column 9—Magnolia Petroleum Co., effective April 6, 1932.

Column 10—Magnolia Petroleum Co., effective April 6, 1932.

(California Crude Oil Prices on Page 22)

TANK WAGON MARKETS

Quotations for gasoline and kerosene in United States, as furnished by the larger marketing concerns, include taxes

September 6, 1932

TAXES

The gasoline quotations given in the following tables include the 1-cent Federal tax as well as state, county and city taxes. The gasoline quoted is the regular or standard grade. In most marketing areas a third or competitive grade is generally available at 1.5 or more cents per gallon under the service station price for the regular grade. Ethyl Gasolines are sold 3 cents above the service station price for the regular grade.

Standard Oil Co. (Indiana)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax of	tank wagon
Chicago	17.1	17.1	4.0	10.0
Decatur, Ill.	17.6	17.6	4.0	10.1
E. St. Louis	16 9	16.9	4 0	9 8
Joliet	17.6	17.6	4.0	10.1
Peoria	17.6	17.6	4.0	10.1
Quincy	17.4	17.4	4.0	9.9
Davenport, Ia.	17.7	17.7	4.0	10.4
Des Moines	17.7	17.7	4.0	10.4
Keokuk	17.7	17.7	4.0	10.4
Sioux City	17.3	17.3	5.0	10.0
Duluth, Minn.	18.7	18.7	4.0	11.0
Mankato	18.3	18.3	4.0	9.7
Minneapolis	18.4	17.4	4.0	11.0
LaCrosse, Wis.	19.4	19.4	5.0	11 1
Milwaukee	17.3	17.3	5.0	10.0
Madison	18 5	18.5	5.0	10 2
Detroit, Mich.	12.6	12.6	4.0	10.6
Grand Rapids	16 5	16.5	4 0	10 3
Saginaw	15 6	15.6	4 0	10 6
Evansville, Ind.	18 2	18.2	5.0	†13.9
Indianapolis	18.4	18.4	5.0	†14 1
South Bend	18.7	18.7	5.0	†14.4
Fargo, N. D.	20.1	20.1	4.0	13.0
Huron, S. D.	19.5	19.5	5.0	11 8
Sioux Falls	19.0	19.0	5.0	11.5
K. C., Mo.*	15.1	15.1	4.0	8.7
Springfield*	17.0	17.0	4.0	8.0
St. Louis*	16.6	16.6	4.0	9.4
St. Joseph*	16.7	16.7	4.0	7.6
Wichita, Kans.	15.9	15.9	4.0	7.0
Bartlesville, Ok.	16.5	16.6	5.0	9.0

*State tax 2 cents, 1-cent city tax and 1-cent Federal tax.

†Includes 4-cent tax. Buyers of kerosene not used as motor fuel can secure refund of tax.

A third grade of gasoline, "Stanolind Blue," is sold at all major points at a price 1½ cents or more below the price on the regular grade shown above.

Effective November 4—New dump discount applicable on all grades of gasoline sold from tank wagon. Any tank wagon customer buying 25 gallons or more at one time will be given 1-cent discount per gallon off tank wagon price at time of delivery. Customers not under contract receive no other discount.

Effective January 1—Discounts on Q.D.A. on 500 gallons or more per month throughout territory; Red Crown Ethyl Gasoline, 3 cents off tank wagon price; Red Crown gasoline, 2½ cents off tank wagon price; Stanolind Blue gasoline, 1 cent off tank wagon price. On deliveries of 75,000 gallons or more each classification allowed 1 cent additional discount.

Discounts on resellers authorized agent's agreement: Same amounts as above except made off service station price instead of tank wagon price.

Stanolind Furnace Oil in Chicago

Effective July 1, 1932, prices f.o.b. Chicago, tank wagon prices: No. 1 (36-40 lt. stw. zero), 150 gallons or more, 6 cents; No. 2 (36-34 stw. zero), 150 gallons or more, 5.50 cents; No. 3 (32-26 zero), 200 gallons or more 4.75 cents; No. 4 (12-16 zero), 400 gallons or more, 4 cents. Viscosity of No. 4, 90-115 at 100° F.

Fuel Oils

Chicago Oil Heat Institute Prices

Spot market prices on 350 gallons or over deliveries, and top prices on contracts, respectively: 38-40, 4½ cents and 3 cents; 32-36, 6 cents and 7½ cents; 28-30, 5½ cents and 6¾ cents; 24-26, 4½ cents and 5½ cents; 18-22, 4½ cents and 5½ cents. On deliveries of less than 350 gallons the spot price is one-half cent higher.

New York and Part of New England District

STANDARD OIL CO. (NEW YORK)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax of	tank wagon
Albany, N. Y.	15.5	16.5	4.0	9.9
New York	16 0	16.0	4.0	8.5
Buffalo	16.5	17.5	4.0	9.0
Rochester	16.5	17.5	4.0	9.0
Syracuse	16.5	17.5	4.0	9.5
Boston, Mass.	15 5	16.5	4.0	8.0
Augusta, Me.	18.0	19.0	4.0	9.0
Manch'tr, N. H.	18.0	19.0	5.0	8.0
Burlington, Vt.	18.5	19.5	5 0	8 5

Southern District

STANDARD OIL CO. (KENTUCKY)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax of	tank wagon
Atlanta, Ga.*	22.0	22.0	7.0	11.0
Augusta	19 5	19 5	7.0	13.5
Macon	21.0	21.0	7.0	13.0
Savannah	20.0	20.0	7.0	12.5
Birm'ham, Ala.	20 0	20.0	7 0	11.0
Mobile	20 0	20 0	7.0	8.0
Montgomery	20 0	20.0	7.0	13 5
Jackson, Miss.	20.0	20 0	7.0	10.0
Vicksburg	20.0	20.0	7.0	10.5
Jack'ville, Fla.	20 0	20.0	8.0	11.0
Miami	22.0	22.0	8.0	12.5
Pensacola	21.0	21.0	8.0	12.5
Tampa	21.0	20 0	8 0	9 0
Lexington, Ky.	18.5	18.5	6.0	10.5
Covington	19.0	19.0	6.0	10.5
Louisville	18.0	18.0	6 0	10 5
Paducah	19.5	19.5	6.0	8.0

A third grade "Kyso Green" is sold at a price generally 2 cents below the price on the regular grade.

In addition to the state tax of 4 cents on gasoline, Montgomery has city and county tax of 2 cents on gasoline and one-half cent on kerosene. Kerosene prices in Georgia include 1-cent tax. In Florida, an inspection fee of 0.125 cent; in Alabama, an inspection fee of one-half cent on kerosene and one-fortieth cent on gasoline. To Pensacola Montgomery and Birmingham state taxes add 1-cent tax. To Mobile state tax add 1-cent city tax. Dealers receive discount of 3 cents off tank wagon price throughout territory.

Rocky Mountain District

CONTINENTAL OIL CO.

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax of	tank wagon
Denver, Colo.	16 0	19.0	5 0	12 5
Pueblo	16.0	19 0	5 0	12 5
Grand Jctn.	20.0	23.0	5.0	14.5
Casper, Wyo.	17.0	20.0	5.0	10.0
Cheyenne	18.0	21.0	5 0	11.5
Butte, Mont.	20.0	23.0	6.0	17.0
Billings	23.0	26.0	6.0	15.5
Great Falls	23.0	26.0	6.0	17.0
Helena	22.0	25.0	6.0	17 0
Salt Lake, Utah	18 0	21.0	5 0	16.0
Albu'que, N. M.	18.0	21.0	*7.0	14.0
Boise, Idaho	22.5	25.5	6.0	18.0
Twin Falls	22.5	25.5	6.0	18.0

*One-cent city tax.

Central South District

STANDARD OIL CO. (LOUISIANA)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax of	tank wagon
N. Orleans, La.	18.0	18 0	*7 0	†11.0
Baton Rouge	17.0	17 0	6 0	†10 0
Alexandria	18.0	18 0	*7 0	†10.0
Lafayette	18.0	18 0	*7.0	†10 0
Lake Charles	18.0	18.0	*7 0	†10.0
Shreveport	16 0	16 0	6 0	†10.0
Knoxville, Tenn.	21.5	21.5	8.0	11 5
Memphis	18 0	18.0	8 0	9.0
Chattanooga	21 0	21 0	8 0	11.5
Nashville	20.0	20 0	8 0	11 0
Bristol	22 0	22.0	8.0	12.0
Lt. Rock, Ark.	18.5	18.5	7.0	9.0

*Includes city tax of 1 cent. †Louisiana kerosene prices include 1-cent state tax. New Orleans kerosene price also includes 1-cent city tax.

†Kerosene prices in Louisiana include 1-cent tax except New Orleans where tax is 3 cents.

Two-cent discount off gasoline and kerosene tank wagon price to dealer and commercial accounts.

Southwestern District

MAGNOLIA PETROLEUM CO.

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax of	tank wagon
Dallas, Tex.	15 5	18 0	5 0	7.0
Fort Worth	16.5	18 0	5.0	9.0
Houston	15.5	18.0	5.0	10.0
San Antonio	15.5	18.0	5.0	9.0
El Paso	15 5	19 0	5 0	12.0
Texarkana	*19 5	*19 5	5 0	†11.0
Muskogee, Ok.	14.5	17.0	5.0	8.0
Okla. City	14.5	17.0	5.0	8.0
Tulsa	15.5	18 0	5.0	8.0
Ft. Smith, Ark.	*17.0	17.0	7.0	10.0
Little Rock	*19.0	*19.0	7.0	†11.0

*Less 2½ cents to dealers. †Less 3 cents to dealers.

Pacific Coast Territory

STANDARD OIL CO. OF CALIFORNIA*

	Gasoline			Kero.
	Tank truck†	Posted retail	Incl'ds tax of	tank wagon
Fresno	19.5	18.5	4.0	17.0
San Francisco	19.0	18.0	4.0	15.5
Los Angeles	18.5	17.5	4.0	15.5
Reno, Nev.	23.0	22.0	5.0	19.0
Portland, Ore.	21 0	20.0	5.0	16.5
Seattle, Wash.	22 0	21.0	6 0	16.5
Tacoma	22.0	21.0	6.0	16.5
Spokane	25.5	24.5	6.0	20.5
Phoenix, Ariz.	19.5	21.5	6.0	20.5

†Above prices are at company's plant or depots as company does not operate stations. A 4-cent per gallon discount is given dealers and customers taking tank wagon lots except in Phoenix where the discount is 1 cent.

*Retail prices posted by Standard Stations, Inc., a subsidiary.

Pennsylvania-Delaware and Part of New England

ATLANTIC REFINING CO.

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax of	tank wagon
Pittsburgh, Pa.	17.0	18.0	4.0	10 0
Philadelphia	16.0	17 0	4.0	10 0
Scranton	16 5	17.5	4 0	10 0
Allentown	16 5	17 5	4.0	10 0
Altoona	17.0	18.0	4.0	10 0
Erie	14.0	14.0	4.0	10.0
Dover, Del.	16.5	17 5	4 0	10.0
Wilmington	16.5	17.5	4.0	10 0
Springf'd, Mass.	16.0	17.0	4.0	8 0
Worcester	16.0	17 0	4 0	8 0
Boston	15.5	16.5	4.0	8.0
Providence, R.I.	14.5	15 5	3.0	8 0
Hartford, Conn.	15.0	16.0	3.0	8 0
New Haven	15 0	16 0	3.0	8.0

Atlantic Coast District

STANDARD OIL CO. (NEW JERSEY)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax of	tank wagon
Atl'tic City, N.J.	16.9	17.9	4.0	11 2
Newark	16 2	17.2	4.0	8.5
Annapolis, Md.	18.5	19.5	5.0	10 0
Baltimore	17.9	18 9	5.0	7.0
Cumberland	19 4	20.4	5.0	11 7
Wash'g'n, D. C.	16.4	17 4	3 0	10.0
Danville, Va.	20 6	21 6	6.0	11.9
Norfolk	19.0	20 0	6 0	10.3
Petersburg	20.1	21.1	6.0	11.4
Richmond	19 4	20 4	6.0	10 7
Roanoke	20 6	21 6	6.0	11.9
Charles'n, W.Va.	19.3	20.3	5.0	11.6
Parkersburg	17.9	18.9	5.0	10.2
Wheeling	18 9	19.9	5.0	11.2
Charlotte, N. C.	22.2	23 2	7.0	12 5
Hickory	22.4	23 4	7.0	12.7
Mt. Airy	22 5	23.5	7.0	13.8
Raleigh	23 0	23 0	7.0	13 3
Salisbury	22 3	23 3	7.0	13 6
Charleston, S.C.	20.0	21.0	7.0	10 3
Columbia	21 9	21.9	7.0	13.2
Spartanburg	22.2	23.2	7.0	13.5

Two cents per gallon discount off tank wagon price of gasoline to dealers except Washington, D. C., and States of Maryland and New Jersey, where discount is 3 cents. Kerosene 1 cent off tank wagon for 25 gallons or more under contract except New Jersey.

Nebraska

STANDARD OIL CO. (NEBRASKA)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax of	tank wagon
Omaha	16 0	17.9	5.0	10.25
McCook	19.0	19.0	5.0	11.75
Norfolk	18.75	18.75	5.0	10.75
N. Platte	19.0	19.0	5.	11.5
Scottsbluff	19.0	19.0	5 0	11.25

Note—Dealers' discount allowed as follows: Red Crown Ethyl, 3 cents off station price; Red Crown, 2½ cents off normal service station price; Nebraska Blue (third grade), 1 cent off normal service station price.

Naphtha

	Tank wagon	Tank car
Oleum spirits	10.7	6.22
V.M.P. naphtha	12.7	7.22
Cleaners' naphtha	15.2	9.22
Stanisol	15.2	9.22

Tank wagon prices f.o.b. Chicago January 4, 1932. Each of above prices subject to discount of 1 cent per gallon for 150-gallon lots if covered by contracts.

Ohio

STANDARD OIL CO. (OHIO)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax of	tank wagon
Ohio points	17.0	17.5	5.0	*12.0

TANK WAGON CHANGES

Standard Oil Co. of Kentucky, effective August 27, reduced gasoline tank wagon and service station prices 1½ cents.

Atlantic Refining Co., effective August 31, reduced gasoline tank wagon and service station prices at Erie, Pa., to 14 cents, including taxes.

Standard Oil Co. of California, effective August 30, reduced gasoline tank wagon and service station prices 2 cents per gallon at Reno, Nev.

RESCIND DRASTIC REGULATIONS

LOS ANGELES, Calif., Sept. 3.—The board of supervisors of Los Angeles has rescinded its action of August 22 in which it made drastic regulation covering the transportation of gasoline, natural gasoline and other highly inflammable petroleum products. A new ordinance is to be framed.

Crude Oil Prices

(Continued from Preceding Page)

Co. ‡Humble Oil & Refining Co. §The Texas Company. ¶Yount Lee Pipe Line Co.

North Louisiana and Arkansas

Smackover, Ark. (all grades)	$ .61
Urania, La. (Apr. 12, 1932)	.49
East El Dorado, Ark. (Apr. 6, 1932)	.61
Stephens, Ark., below 29° (Apr. 12, 1932)	.61
Stephens, Ark., 29° and above (Apr. 12, 1932)	.64
Other fields	See gravity table

Note—Smackover, all grades, The Texas Company, April 1, 1932; Magnolia Petroleum Co., April 6, 1932; Standard Oil Co. of Louisiana, Gulf Refining Co. and Louisiana Oil Refining Co., April 11, 1932. Urania posted by H. L. Hunt, Inc., and Louisiana Oil Refining Co.; East El Dorado by Magnolia Petroleum Co., effective April 6, 1932; by Gulf Refining Co., effective April 11, 1932; Stephens, Ark., by Louisiana Oil Refining Co and Atlantic Oil Producing Co.

South Central and Southwest Texas

Darst Creek (Apr. 1, 1932)*	$ .71
Luling (Apr. 1, 1932)*	.64
Mirando (Apr. 1, 1932)*	.90
Pettus (Apr. 11, 1932)‡	1.00
Salt Flat (Apr. 11, 1932)‡	.71
Thrall§	
Lytton Springs (Lockhart) (Apr. 1, 1932)*	.94
Dobrowolski¶	
Same as Mid-Continent gravity scale up to and including 38-38.9°	
Somerset¶	
Same as Mid-Continent gravity scale up to and including 38-38.9°	

*Magnolia Petroleum Co., The Texas Company, Humble Oil & Refining Co. posted 80 cents for Mirando, April 11. ‡Thrall prices same as North Central Texas less 19½ cents per cwt. freight. §Grayburg Oil & Refining Co., Pioneer Oil & Refining Co. and Texas Petroleum Products. ¶Pioneer Oil & Refining Co. ‡Humble Oil & Refining Co.

Middle Western States

OHIO OIL CO.
(Effective April 11, 1932)

Lima	$1.15
Wooster	1.35
Illinois	1.10
Indiana	.75
Princeton	1.10
Plymouth	Shut In
Western Kentucky	1.00
Midland, Mich. (July 13, 1932)*	.80
Muskegon (July 14, 1932)†	
	Mid-Continent gravity scale
Muskegon (June 30, 1932)‡	.85
Somerset, Ky. (Apr. 25, 1932)	.85
Hart County, Ky. (June 10, 1932)§	1.00

*Posted by Pure Oil Co. Old Dutch Refining Co. pays 20 cents per barrel over Pure Oil Co.'s posted price. †Naph-Sal Refining Co. ‡Old Dutch Refining Co. §Posted by Stoll Refining Co. Somerset, Ky., crude purchased by Ashland Refining Co., Ashland, Ky., and delivered through own pipe line.

Mexico

Panuco*	$0.45

*F.o.b. ship, based on July transactions and exclusive of production and export taxes and bar dues.

Canada

Ontario (Nov. 3, 1931):	
Petrolia*	$1.94
Oil Springs*	1.97
Alberta (Apr. 22, 1932):	
Turner Valley†:	
Crude oil 40-44.9	1.55
Crude oil 45-45.9	2.15
Crude oil 50 and above	2.95
Crude naphtha	3.32
Discolored naphtha	3.00

*Imperial Oil, Ltd. †Imperial Oil, Ltd. and Regal Oil & Refining Co.

NEWS FOR SALES DEPARTMENTS

Larger Volume Necessary When Prices Are Reduced

A retail marketing authority has worked out a schedule showing the increase in volume of sales required to keep dollar gross profit from shrinking when retail prices are reduced without a corresponding reduction in cost of merchandise, as reported in Domestic Commerce Bulletin.

A price cut of 5 per cent requires volume increase of 5.26 per cent.

A price cut of 10 per cent requires volume increase of 11.11 per cent.

A price cut of 15 per cent requires volume increase of 17.64 per cent.

A price cut of 20 per cent requires volume increase of 25 per cent.

A price cut of 25 per cent requires volume increase of 33.33 per cent.

A price cut of 33⅓ per cent requires volume increase of 50 per cent.

Quoting these figures, the Oklahoma Petroleum Marketers Association points out:

"Gross retail 18 cents less tax 5 cents leaves 13 cents. A 2-cent reduction is 15 per cent and to realize as much profit as 16 cents gross, as at 18 cents the dealer must sell 17.64 per cent more gallons.

"A gross retail of 14 cents less tax 5 cents equals 9 cents. A 2-cent reduction is equal to 22.22 per cent and would necessitate selling more than 25 per cent more gallons if cost of merchandise remained constant. Of course, if the wholesale dealer obligingly reduces his price because the retailer cuts his, then the retailer can't be worried because the wholesaler is taking the loss."

SHEBOYGAN OIL CO.

MADISON, Wis., Sept. 5.—The Sheboygan Oil Co. of Sheboygan, Wis., filed articles of incorporation with the secretary of state here, to sell petroleum products and also deal in automotive accessories. Capitalization is $10,000 in 400 shares and the incorporators are C. Oscar Larson, Martin Benson and C. Sydney Larson, all of Sheboygan, and Ella G. Benson of Milwaukee.

AUTOMOBILE REGISTRATIONS

During July new passenger car registrations in 45 states representing 97.44 per cent of the country reached 100,990 units, says R. L. Polk & Co. This is a decline of 30.45 per cent from registrations of 145,215 units during June and a 46.67 per cent decrease from registration of 189,352 units during July a year ago in the same states.

SINCLAIR AWARDED CONTRACT

The Sinclair Refining Co. has been awarded a contract to supply the State of Texas with gasoline and lubricating oils over the coming year. On gasoline the company bid 3.6 cents off the posted price. The State uses approximately 5,000,000 gallons of gasoline yearly and the entire contract will total approximately $175,000 for the year.

PROHIBITS "VASELINE" IMPORT

NEW YORK, Sept. 3.—The Canadian Department of National Revenue has issued a ruling prohibiting the importation into Canada of goods imported for sale bearing thereon or on the containers thereof the word of trademark "Vaseline."

"Vaseline" is the registered trademark of the Chesebrough Manufacturing Co., covering that firm's line of petroleum jellies. The Chesebrough company does not ship into Canada from the United States, but has a plant at Montreal, where its product is manufactured for Canadian consumption.

C.F.R. Detonation Sub-Committee Now Engaged in Final Laboratory Work

The C.F.R. detonation subcommittee is now at work at the Waukesha, Wis., laboratory of the Waukesha Motor Co. where facilities were made available for motor knock testing. The work was started at the laboratory on August 22 and is still in progress.

The laboratory work follows three weeks of road testing at Uniontown Hill, Pa., which was the most complete investigation of its kind ever made by the automobile and petroleum industries working in co-operation to solve a mutual problem. When the laboratory work is completed it is hoped that the necessary data for the correlation of laboratory and road tests will be available to form the basis for important changes in laboratory testing methods covering antiknock rating of motor fuels, now under consideration.

The road tests were carried out under the supervision of the road test correlating group of the C.F.R. detonation subcommittee. Fourteen petroleum and automotive laboratories, including the U. S. Bureau of Standards, sent research men and trained operators to Uniontown for these tests. Fifteen popular makes and models of cars were included and 15 fuels.

The tests were started on August 3 and continued through August 17. The cars were driven approximately 15,000 miles, an equivalent of 2,500 runs up the hill, and 350 gallons of sample fuels and 400 gallons of reference fuels were consumed. Some 10,000 observations of knock were recorded and all results will represent the findings of at least two groups of men, some of three or four groups, with usually three men to a group. A series of meetings were held throughout the period of test work and a preliminary analysis of the data made.

Making road tests at Uniontown, Pa. Left to right— E. D inning, Shell Petroleum Corp.; J. M. Campbell, General Motors Research Laboratory; J. G. Cook, The Texas Company; C. B. Veal, Society of Automotive Engineers; N. R. White, U. S. Bureau of Standards; A. L. Clayden, Sun Oil Co.; Mrs. Clayden; Cleveland Walcutt, Ethyl Gasoline Corp.; Mrs. Walcutt; A. L. Beall, Vacuum Oil Co.; C. B. Kass, Standard Oil Development Co.; J. C. Burk (above), Vacuum Oil Co.; H. L. Horning, Waukesha Motor Co.; Mrs. Beall; H. F. Huf, Atlantic Refining Co.; W. Anderson, Chrysler Corp.; L. B. Voshall (above), The Texas Company; A. W. Pope, Waukesha Motor Co.; Gilbert Way, Chrysler Corp.; Mrs. Voshall; W. M. Holaday, Standard Oil Co. (Indiana); B. W. Dickinson, U. S. Bureau of Standards; H. W. Best, Yale University; J. R. Sabina, Atlantic Refining Co.; G. A. Hope, Standard Oil Co. of New York.

ORGANIZE N. CAROLINA JOBBERS

Oil marketers of North Carolina have organized the North Carolina Petroleum Industries committee with the major immediate objective of co-operating with state officials in suppressing gasoline bootlegging and gasoline tax evasion.

H. P. Dortch of The Texas Company, Goldsboro, is chairman of the committee. Other members are: C. C. Beasley, Pure Oil Co., Charlotte; C. M. Byers, Standard Oil Co. of New Jersey, Charlotte; E. R. Burt, Biscoe Oil Co., Biscoe; J. E. Dozier, Shell Eastern Petroleum Products, Inc., Charlotte; P. M. Isbill, The Texas Company, Norfolk, Va.; T. F. Patterson, Atlantic Refining Co., Charlotte; J. N. Koontz, Sinclair Refining Co., Atlanta, Ga.; E. T. Lemmon, Standard Oil Co. of New Jersey, Norfolk, Va.; L. M. Hale, Gulf Refining Co., Greensboro; and W. B. Cope, American Oil Co., Greensboro.

REVISE RULING IN BRAZIL

NEW YORK, Sept. 3.—Due to an insufficient supply of domestic absolute alcohol, a Brazilian decree (No. 21,600) permits importers of gasoline to purchase alcohol of not less than 96° Gay Lassac at 15° C., for mixing purposes, until January 1, 1933. After that date the tolerance will cease, and gasoline importers will be required to purchase domestic absolute alcohol (anhydrous) in a quantity amounting to 5 per cent of their importations of gasoline as required under the existing law.

Report Shows Pyramiding of 138 Taxes on Gasoline

Pointing out that the assessment of 138 different levies on gasoline results in "pyramiding of these taxes to make the tax rate exorbitant and provide a profitable incentive to wholesale evasion," the report on the government of the State of Alabama, recently prepared by the Brookings Institution, Washington, urges that the power to levy a gasoline tax be confined to the state government, and that counties and cities be no longer permitted to make such levies. The governments, state and local, have pushed the rates up beyond the limit of maximum effectiveness, and to a point where any organization capable of checking up on the complete collection "would eat up a large part of the average yield," this report indicates.

In order to permit the continued development of county highway systems under the aegis of the gasoline tax, it is recommended that the State inaugurate a system of state aid to counties, establishing a relationship between state highway agencies and county road agencies analogous to that now existing under the Federal Aid plan between the U. S. Bureau of Public Roads and the state highway departments. State aid would be necessarily limited, for the present at least, to county trunk roads, and the redistribution of the revenues between the state and counties should be based solely on traffic requirements and should bear no fixed relation to county boundaries.

LICENSE FEE UNREASONABLE

The District Court for the Fifteenth Judicial District of Minnesota has handed down its decision relative to the license fee which has existed in Brainerd, Minn., for some time, amounting to $25 for each pump at a service station. The court found the fee to be "excessive and unreasonable and greatly in excess of the reasonable costs and expenses to the said city of Brainerd for the issuance of such license and the cost and expense of inspection and supervision." In his memorandum the judge stated "the evidence offered and received on the part of the defendant was, beyond question, that the actual cost to the city of the issuance of the license by the clerk was nominal and the court could not reasonably find that such cost to the city exceeded the sum of $1."

INTRODUCES NEW GASOLINE

The Magnolia Petroleum Co. on September 1 introduced Mobilgas throughout its southwestern marketing territory as its regular grade of motor fuel. The gasoline was made available at 12,000 stations of various types located in Texas, Oklahoma, Kansas, Arkansas, Louisiana and New Mexico.

The Magnolia company is one of the Socony-Vacuum group of companies and the introduction of the new gasoline follows similar action on the part of other subsidiary companies engaged in marketing. "Climatic Control" is the motor fuel characteristic emphasized in the Magnolia announcement.

NEWS FOR PETROLEUM REFINERS

Pennsylvania Refiners Curtail Runs to Stills

BRADFORD, Pa., Sept. 3.—Due to the lessened demand for refinery products several refiners in this section and other parts of the Pennsylvania are reducing their purchases of Pennsylvania Grade crude oil. It is contended that unless producers co-operate and curtail their production that reductions in posted schedules are inevitable.

In a letter to its producing connections the Kendall Refining Co., largest of the local refiners, asks a reduction of 25 per cent in production. The letter to producers states:

"Effective June 1, 1932, all refiners of Pennsylvania Grade crude were asked to reduce their runs to stills approximately 28 per cent. This was found not only advisable but imperative, in order to bring the manufacture of refined products into balance with the decreased consumption. This was strictly complied with by us. To accomplish this, however, it was necessary for us to reduce our runs from Kendall owned leases 41 per cent. We did this willingly rather than ask the producers on our lines to curtail, believing by September 1 conditions would change.

"We now find that we were mistaken, and that instead the situation has become much worse, and is actually becoming serious. We are, therefore, obliged to ask for the immediate and hearty co-operation of every producer on our lines. We respectfully request that beginning September 1 your crude production be cut 25 per cent of the daily average amount which you produced during the month of July.

"We believe that only by a drastic and immediate curtailment of this nature can the Pennsylvania petroleum industry be put on a sound and improved basis in a reasonably short time, resulting in mutual benefits to the producer and refiner of Pennsylvania Grade crude."

In connection with the decrease in production requested by the Kendall Refining Co., the New York State Oil Conservation Board, at a meeting of the executive committee in Bolivar, N. Y., last week, requested that the production of the Allegany Field be limited to 55 per cent of the month of April, 1930. This order was effective immediately.

A letter of warning was issued by the conservation board of that district stating that "for the good of the industry and to prevent adverse conditions within the Pennsylvania Grade fields, we request that the producers on the Sinclair lines reduce their production to 55 per cent of April, 1930.

"The Sinclair Refining Co., at its Wellsville, N. Y., refinery, has found it necessary to reduce its runs from 6,000 bbls. daily to 5,000 bbls. daily and we request your hearty co-operation in the matter."

RESUME OPERATIONS

Imperial Oil, Ltd., has started operations in its reconditioned refinery at Fort Morgan, in the Great Bear Mining district along the Mackenzie River to supply gasoline to operate river boats and for general power purposes in the isolated district. Ronald W. McKinnon is in charge of operations. Whereas gasoline was selling at $2 a gallon prior to the starting of the refinery, gasoline is said to be available now at 90 cents a gallon. The company is receiving oil at the plant from two wells in the Fort Morgan area.

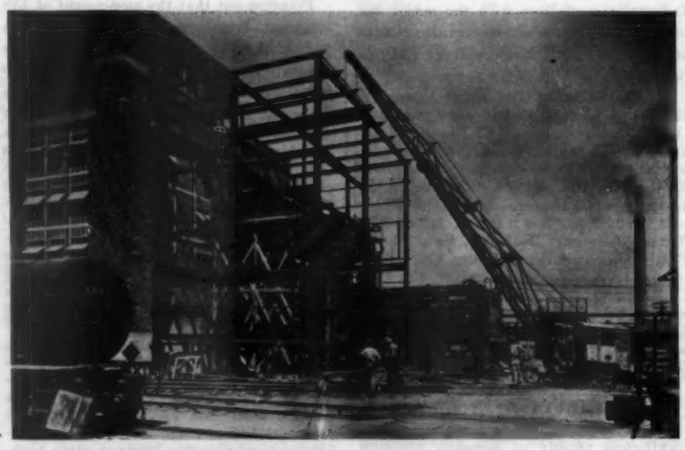
Sinclair Is Now Engaged in $2,500,000 Improvement Program at Refineries

The Sinclair Refining Co. is now engaged in a $2,500,000 improvement program at four of its refineries, according to an announcement of the past week. The improvements now begun complete a program upon which about $20,000,000 has been spent in the past three years by the Sinclair company.

The Bulk of the $2,500,000 will be spent at the Sinclair refineries located at Coffeyville and Argentine, Kans., refineries. The latter plant is to be reopened after being shut down for over a year. New equipment costing in excess of $1,000,000 is to be installed immediately. Modern high-pressure stills are to be installed at both the Argentine and Coffeyville refineries. The refineries have crude oil capacities of 10,000 bbls. each daily. Improvements are also to be made at the East Chicago, Ind., and Marcus Hook, Pa., refineries of the company. Extensive improvements have already been made at these two refineries.

Officials of the company stated that these improvements were authorized at this time with the purpose of contributing in some measure to increased employment, anticipating modernization measures that would become necessary in the near future. The step also represents a continuation of the policy adopted by the Sinclair company some three years ago of maintaining all of its refineries at a high stage of efficiency for the manufacture of gasoline and lubricants of the quality now demanded for automobile and industrial use. The improvements already completed have enabled the Sinclair company to materially increase the antiknock rating of the motor fuel distributed by its marketing department.

Pressure Still Installation



Boiler House Extension

DERBY ADOPTS FIVE-DAY WEEK

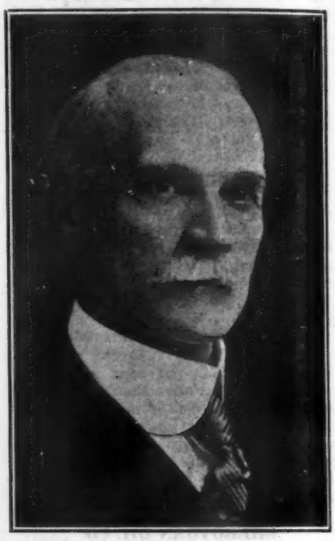
The Derby Oil & Refining Co., Wichita, Kans., on September 1 added 50 men to its forces following the adoption of the five-day week. Some of the men are employed at the Wichita refinery of the company. Daily wage scales were not reduced.

C. A. CHUMAR RETIRES

C. A. Chumar, who has been connected with Standard Oil Co. of New Jersey organizations for nearly a half century, has been retired. He was manager of the Bergenport Chemical Works, with offices at 26 Broadway, New York, at the time of his retirement.

S. R. Parsons of British-American Dies at Toronto

CHATHAM, Ontario, Sept. 2.—Silas Richard Parsons, chairman of the board of directors of the British-American Oil Co. and for many years an outstanding figure in the Canadian refining industry, died at Toronto on August 27 in his seventy-ninth year. Born at Port Hope, Ontario, on August 4, 1854, Mr. Parsons as a young man was engaged in the



S. R. PARSONS

wholesale stationary business in Winnipeg, Manitoba.

In 1906 he returned to eastern Canada to found the British-American Oil Co. with refinery at Toronto. Mr. Parsons was president of this company from its inception till a few years ago, when he left the presidency to become chairman of the board of directors. He was largely responsible for the development of the company, which now has large refineries at Toronto and Montreal, a nation-wide distributing system, and its own oil production in the Oklahoma and Texas Fields.

Mr. Parsons was active in financial, industrial and public affairs, and was for many years associated with the Canadian Manufacturers Association, of which he was president in 1917.

Empire Lets Contract for Unit at Ponca City Plant

The Empire Oil & Refining Co. last week awarded a contract to Black, Sivalls & Bryson, Inc., Tulsa, for the construction of a combination gasoline recovery and stabilizing unit at its Ponca City, Okla., refinery. The new unit, which will replace equipment installed several years ago, will have a recovery capacity of 5,000,000 feet of gas daily and sufficient stabilizing capacity to take care of plant requirements.

The Ponca City refinery, which is one of Empire's three Mid-Continent plants now operating, has a crude oil capacity of 12,000 bbls. daily, and a cracking capacity of 4,500 bbls. daily. A new combination cracking and reforming unit was completed two weeks ago and is now operating.

NATURAL GASOLINE MANUFACTURE

Major Fields Show Largest Decline in Gasoline Production

Except for the Oklahoma City Field, every major area in the United States produced less natural gasoline in the first seven months of this year than in the same period last year. However, the increase in the Oklahoma City Field fell far short of the decline shown for other Oklahoma fields. The total Oklahoma production was substantially less than a year ago and was consistent with the trend elsewhere.

This decline emphasized the fact that the market for natural gasoline had been materially lessened during the past seven months and also that no large, new wet gas fields were developed within that time which necessitated building additional plants and producing gasoline regardless of the economics of the problem as has been done in a few instances in recent years.

Of the various states which showed substantial reduction in their output, California leads and accounts for nearly 40 per cent of the decline for the country. California's production of natural gasoline for the first seven months of this year is shown as 329,100,000 gallons and compares with 416,400,000 gallons for the same period a year ago. This decrease of 87,300,000 gallons is accounted for by a general reduction of the output in all sections. Because of the large-scale operations in the Kettleman Hills, Long Beach and Santa Fe Springs areas, these contributed most.

It is interesting to note the trend of production in the Kettleman Hills Field where during the period from February of last year to July, there is shown a gradually increasing output of natural gasoline. Then during the first seven months of this year the reverse of this is seen and last July, the average production was below that of any month in the period under study. The other California areas began their movement of decreasing production early in 1931 and, unlike Kettleman Hills, continued throughout that year.

Next in the list of states accounting for the drop in production is Oklahoma. Whereas Oklahoma produced 293,000,000 gallons in the first seven months of 1931, it produced 229,200,000 gallons in the

(Continued on Page 46)

Natural Gasoline Production During July Decreased to Lowest Point Since 1926

In July natural gasoline production dropped to the lowest since 1926. The daily average output for this month was 3,810,000 gallons compared to 3,940,000 gallons in June. The total for the month remained the same as June, however, the difference being due to the one day longer period.

Total production for July amounted to 118,800,000 gallons with only slight changes being shown in any one of the producing areas. Declines were reported in the Appalachian, Illinois, Oklahoma, Kansas and Louisiana areas while a compensating increase was shown in Texas. The California output remained the same.

The East Texas Field continues to be a factor in the total output for the State, but it remains small and the increase shown here is reported for the West Central and Panhandle areas where production may be termed "settled." Stocks of natural gasoline were not drawn upon as heavily in July as they were in June, but declined from 34,106,000 gallons on hand at the end of June to 31,809,000 gallons at the end of July.

This is a new low for stocks of natural gasoline for this year and compares with 35,900,000 gallons held a year ago. The trend of inventories has been downward since April of this year as it was a year ago, and the industry is in a favorable position to improve its market over the balance of the year as a result.

The following table shows the trend of natural gasoline stocks over last year and so far this year:

NATURAL GASOLINE STATISTICS FOR JULY
(Thousands of gallons)

	Natural gasoline: Production July, 1932	June, 1932	July, 1931	Jan.-July, 1932	Stocks end of month July, 1932	June, 1932	Blended motor fuel July, 1931: Natural gasoline used	Naphtha or other oils used	Stocks end of month
Appalachian	3,500	3,700	3,700	40,600	4,028	5,066	36	57	120
Ill., Ky., Ind.	600	700	600	4,600	290	525	...	...	...
Oklahoma	29,800	29,900	39,400	229,200	14,074	13,251	17	37	16
Oklahoma City	5,400	5,900	5,300	46,700	2,542	2,526	...	...	...
Osage County	3,900	3,700	5,300	28,100	2,194	2,138	...	1	5
Seminole	8,800	8,900	16,900	69,700	5,567	5,088	1	...	...
Rest of State	11,700	11,400	11,900	84,700	3,771	3,499	16	36	11
Kansas	1,600	1,700	2,500	15,000	786	871	31	8	46
Texas	28,600	27,900	34,000	207,600	8,200	10,198	29	4	4
Panhandle	13,600	13,400	17,000	101,300	3,322	4,700	1	2	...
North Texas	2,100	2,000	2,400	15,200	798	792	...	...	1
West Central	6,800	6,300	8,900	51,300	3,074	3,632	28	2	3
Rest of State	6,100	6,200	5,700	39,800	1,006	1,074	...	...	...
Louisiana	3,600	3,800	4,300	29,200	779	930	...	...	...
Arkansas	1,700	1,700	2,200	12,100	308	205	...	...	4
Rocky Mountain	5,200	5,200	5,900	35,300	675	701	14	3	14
California	43,500	43,500	57,300	329,100	2,669	2,359	...	...	...
Huntington Beach	1,400	1,400	1,700	10,300	.....	.....	...	...	...
Kettleman Hills	10,200	10,300	15,900	80,400	.....	.....	...	...	...
Long Beach	8,500	8,700	10,900	64,500	.....	.....	...	...	...
Santa Fe Springs	8,200	8,100	10,000	60,200	.....	.....	...	...	...
Ventura Avenue	2,800	2,600	4,400	23,700	.....	.....	...	...	...
Rest of State	12,400	12,400	14,400	90,000	.....	.....	...	...	...
Total	118,100	118,100	149,900	902,700	31,809	34,106	127	109	204
Daily average	3,810	3,940	4,840	4,260	.....	.....	...	...	...
Total (thousands of barrels)	2,812	2,812	3,569	21,493	757	812	3	3	5
Daily average	91	94	115	102	.....	.....	...	...	...

STOCKS OF NATURAL GASOLINE REPORTED IN GALLONS AT CLOSE OF PERIOD

1931	
January	25,500,000
February	29,160,000
March	37,100,000
April	42,300,000
May	41,800,000
June	36,100,000
July	35,900,000
August	30,300,000
September	25,500,000
October	22,000,000
November	26,900,000
December	27,100,000

1932	
January	34,000,000
February	36,800,000
March	39,778,000
April	44,584,000
May	44,279,000
June	34,106,000
July	31,809,000

The accompanying table showing production and stocks was compiled by the Bureau of Mines.

Henderson-Panhandle Gas Case Before Commission

AUSTIN, Tex., Sept. 6.—C. V. Terrell, chairman of the Texas Railroad Commission, will hear testimony here this week on the application of the Henderson Gasoline Co. to strip the gas from some of its wells in the Panhandle area, some of the gas being considered dry. This case is being watched carefully by all gas producing and marketing companies in the Texas Panhandle for if the Henderson interests are granted unrestricted rights in the development and utilization of the gas under their land, as many landowners in that area contend is the equitable procedure, it will mean that many wells will be drilled to protect offset acreage and also substantial quantities of natural gasoline could eventually come from that area.

If the permit to develop the Henderson properties and utilize the gas for stripping purposes is denied, the alternative suggested is the shutting down of competitive portions of the field to stop the gas flow. Such a move would be considered unfavorable by the major pipe line companies taking gas from the field for transportation to distant states.

TREND OF PRODUCTION OF NATURAL GASOLINE IN THE UNITED STATES BY DISTRICTS DURING FIRST SEVEN MONTHS OF 1932 AND 1931
(Millions of gallons)

	1932 Jan.	Feb.	Mar.	Apr.	May	June	July	1931 Jan.	Feb.	Mar.	Apr.	May	June	July	First 7 mo. 1932	1931	Decrease
Appalachian	7.4	7.2	7.8	6.2	4.8	3.7	3.5	8.9	7.6	8.4	6.8	5.9	4.2	3.7	40.6	45.5	4.9
Kentucky, Illinois and Indiana	.6	.6	.8	.7	.6	.7	.6	1.2	1.0	1.1	.8	.8	.6	.7	4.6	6.2	1.6
Oklahoma	36.0	33.6	33.2	33.3	33.4	29.9	29.8	44.1	39.8	44.6	42.6	43.7	38.8	39.4	229.2	293.0	63.8
Oklahoma City	7.7	6.5	6.9	7.2	7.1	5.9	5.4	3.8	3.5	4.7	4.9	5.9	5.6	5.3	46.7	33.7	*13.0
Osage County	4.5	4.0	4.1	3.9	4.0	3.7	3.9	7.7	5.7	6.2	5.9	5.8	5.3	5.3	28.1	41.9	13.8
Seminole	10.8	10.4	10.0	10.7	10.1	8.9	8.8	18.6	17.6	19.6	18.9	18.4	16.5	16.9	69.7	126.5	56.8
Rest of State	13.0	12.7	12.2	11.5	12.2	11.4	11.7	14.0	13.0	14.1	12.9	13.6	11.4	11.9	84.7	90.9	6.2
Kansas	2.6	2.4	2.3	2.2	2.2	1.7	1.6	2.9	2.8	3.2	3.0	2.7	2.4	2.5	15.0	19.5	4.5
Texas	31.0	30.1	30.4	29.9	29.7	27.9	28.6	40.8	36.7	39.4	37.2	35.7	34.3	34.0	207.6	258.1	50.5
Panhandle	15.6	14.9	15.2	14.4	12.2	13.4	13.6	20.0	17.8	18.6	17.8	17.4	16.9	17.0	99.3	125.5	26.3
North Texas	2.2	2.2	2.3	2.1	2.4	2.0	2.1	3.5	3.1	3.3	3.0	2.6	2.5	2.4	15.2	20.4	5.2
West Central	8.1	7.6	7.7	7.6	7.2	6.3	6.8	11.1	9.8	10.7	10.3	10.0	8.9	8.9	51.3	69.7	18.4
Rest of State	5.1	5.4	5.3	5.8	5.9	6.2	6.1	6.3	6.0	6.8	6.1	5.7	6.0	5.7	39.8	42.5	2.7
Louisiana	4.7	4.4	4.4	4.3	4.0	3.8	3.6	5.7	5.7	5.8	5.5	4.9	4.7	4.3	29.2	36.6	7.2
Arkansas	1.7	1.7	1.7	1.8	1.8	1.7	1.7	2.5	2.4	2.5	2.5	2.4	2.3	2.2	12.1	16.8	4.7
Rocky Mountain	5.2	4.7	4.9	5.0	5.1	5.2	5.2	5.7	4.9	5.3	5.5	6.1	6.0	5.9	35.3	39.4	4.1
California	51.2	47.5	48.8	46.9	47.7	43.5	43.5	64.9	54.4	62.5	59.4	60.7	57.2	57.3	329.1	416.4	87.3
Long Beach	9.7	8.9	9.8	9.4	9.5	8.7	8.5	13.8	12.4	13.5	11.9	11.8	11.1	10.9	64.5	85.4	20.9
Ventura Avenue	4.4	4.2	3.6	3.0	3.1	2.6	2.8	4.9	4.4	5.2	4.9	4.8	4.5	4.4	23.7	32.1	9.4
Huntington Beach	1.4	1.4	1.5	1.5	1.7	1.4	1.4	2.0	1.8	2.0	1.9	1.9	1.7	1.7	10.3	13.0	2.7
Kettleman Hills	13.5	12.4	11.8	10.9	11.3	10.3	10.2	16.5	11.9	14.8	15.0	15.6	15.7	15.9	80.4	105.4	25.0
Santa Fe Springs	9.4	8.5	8.6	8.7	8.7	8.1	8.2	12.2	10.0	11.3	10.9	11.2	9.9	10.0	60.2	75.8	15.4
Rest of State	12.8	12.1	13.5	13.4	13.4	12.4	12.4	15.5	13.9	15.7	14.8	15.2	14.3	14.4	90.0	102.9	13.9
Total United States	140.4	132.2	134.3	130.3	129.3	118.1	118.1	176.7	155.3	172.8	163.3	162.9	150.5	149.9	902.7	1,131.4	228.7
Daily average	4.5	4.6	4.3	4.3	4.2	3.9	3.8	5.7	5.5	5.6	5.4	5.3	5.0	4.8	4.2	5.3	1.1
Stocks at end of period	40.0	36.8	39.8	44.6	44.3	34.1	31.8	25.5	29.1	37.1	42.3	41.8	36.1	35.9	31.8	35.9	4.1

*Increase.

Bureau of Mines Petroleum Statistics for Month of July, 1932

COMPARATIVE ANALYSES
(Thousands of barrels of 42 U. S. gallons)

	July, 1932		June, 1932		Jan.-July,	Jan.-July,
	Total	Dly. av.	Total	Dly. av.	1932	1931
CRUDE PETROLEUM:						
Runs to stills: Domestic	67,374	2,173	67,704	2,257	462,791	489,958
Foreign	4,081	132	4,622	154	26,822	28,441
Total	71,455	2,305	72,327	2,411	490,613	518,399
Imports	1,525	49	7,869	262	33,769	29,097
Exports	2,349	73	2,791	93	16,428	14,474
MOTOR FUEL:						
Production	34,295	1,106	33,996	1,133	234,542	250,303
Imports	64	2	1,209	40	7,698	8,565
Exports	2,362	76	3,521	117	28,614	28,356
Stocks*	56,936	.....	56,264	.....	56,936	39,558
Domestic demand	31,317	1,010	35,786	1,192	213,102	231,146
KEROSENE:						
Production	3,629	117	3,523	117	25,529	24,293
Imports	.....	.....	.....	.....	10	3
Exports	876	28	1,074	36	6,273	7,344
Stocks	6,033	.....	5,134	.....	6,033	6,869
Domestic demand	1,854	60	2,128	71	18,565	16,971
GAS OIL AND FUEL OIL:						
Production	24,717	797	24,312	810	176,280	198,669
Transfers†	170	5	624	21	3,923	(‡)
Imports	816	26	2,346	78	15,383	14,053
Exports	1,217	39	1,391	46	12,892	18,036
Stocks	136,017	.....	131,889	.....	136,017	135,926
Domestic demand	20,358	657	23,575	786	182,333	(‡)
LUBRICANTS:						
Production	1,958	63	2,290	76	14,216	15,775
Imports	.....	.....	3	....	11	19
Exports	270	9	725	24	4,307	4,619
Stocks	7,991	.....	7,323	.....	7,991	9,597
Domestic demand	1,911	33	3,054	102	11,514	12,549
WAX (thousands of pounds):						
Production	31,640	1,021	36,400	1,213	283,640	259,560
Imports	2,184	70	2,151	72	24,554	18,251
Exports	14,032	453	12,439	415	118,745	152,670
Stocks	202,023	.....	198,526	.....	202,023	198,407
Domestic demand	16,295	526	23,559	752	158,626	159,326
COKE (short tons):						
Production	152,500	4,919	145,100	4,837	1,037,600	1,179,200
Stocks	1,544,200	.....	1,536,700	.....	1,544,200	1,390,700
ASPHALT (short tons):						
Production	234,000	7,548	254,500	8,483	1,391,700	1,683,800
Imports (natural)	1,500	48	6,900	230	15,000	.....
Stocks	386,300	.....	402,600	.....	386,300	343,400
ROAD OIL:						
Production	1,410	45	1,223	41	3,999	2,844
Stocks	1,096	....	999	.....	1,096	691
STILL GAS:						
Production	3,763	121	3,539	118	28,784	21,119
MISCELLANEOUS:						
Production	§170	§5	719	24	3,211	2,487
Stocks	499	.....	1,046	.....	499	695

*Stocks of motor fuel in 1932 include terminal and transit stocks. †Includes crude used as fuel and net transfers to fuel oil stocks in California. ‡Not available. §Minus quantity.

SUPPLY AND DEMAND OF ALL OILS
(Including wax, coke, and asphalt in thousands of barrels of 42 U. S. gallons)

	July, 1932	June, 1932	July, 1931	Jan.-July, 1932	Jan.-July, 1931
NEW SUPPLY:					
Domestic production:					
Crude petroleum	66,310	64,835	78,210	463,942	498,609
Da'ly average	2,139	2,161	2,523	2,173	2,353
Natural gasoline	2,812	2,812	3,549	21,493	24,938
Benzol*	80	81	145	705	1,171
Total production	69,202	67,728	81,924	486,140	526,718
Daily average	2,232	2,258	2,643	2,282	2,485
Imports:					
Crude petroleum	1,525	7,869	3,588	33,769	29,097
Refined products	897	3,605	2,435	23,173	22,719
Total new supply, all oils	71,624	79,202	88,947	543,082	578,534
Daily average	2,310	2,640	2,869	2,550	2,729
Increase in stocks, all oils	800	†9,590	†3,736	†4,290	†17,501
DEMAND:					
Total demand	70,824	88,792	92,683	547,372	596,035
Daily average	2,285	2,960	2,990	2,570	2,811
Exports:					
Crude petroleum	2,349	2,791	2,621	16,428	14,474
Refined products	4,928	6,887	9,135	48,451	60,105
Domestic demand	63,647	79,114	80,927	482,493	521,456
Daily average	2,053	2,637	2,611	2,265	2,460
Excess of daily average domestic production over domestic demand	179	‡379	32	17	25
STOCKS (end of month):					
Crude petroleum:					
East of California	317,980	322,845	351,570	317,980	351,570
California§	40,405	40,938	43,625	40,405	43,625
Total refinable crude	358,385	363,783	395,195	358,385	395,195
Natural gasoline	3,890	3,892	3,711	3,890	3,711
Refined products§	265,012	258,812	250,255	265,012	250,255
GRAND TOTAL STOCKS ALL OILS	627,287	626,487	649,161	627,287	649,161
Days' supply	276	212	217	244	231
Bunker oil (included above in domestic demand)	3,248	3,714	3,839	23,306	27,054

*Based upon production of coke reported to Coal Division by those by-product coke plants that recover benzol products. †Decrease. ‡Deficiency. §California heavy crude and residual fuel included under refined products.

RECORD OF WELLS FOR IMPORTANT FLUSH FIELDS, JULY, 1932*

	Completions			Total initial	Av. initial production (bbls.)	Drilling
	Oil	Gas	Dry	duction (bbls.)		July 31
Texas	881	18	189	1,699,100	1,900	842
East Texas†	719	2	9	1,653,700	2,300	269
Gulf Coast	29	1	24	21,900	800	103
West Texas	25	...	6	6,000	200	86
California	17	...	19	24,500	1,400	101
Kettleman Hills	3	...	1	13,700	4,600	12
Long Beach	2	...	3	200	100	3
Playa del Rey	1	...	2	25	25	3
Oklahoma	77	11	35	54,000	700	305
Oklahoma County	12	1	...	43,400	3,600	57
Pottawatomie and Seminole County	10	...	1	6,700	700	30
New Mexico	4	1	...	6,300	1,600	53
Lea County (Hobbs)	3	...	...	6,300	2,100	9
Other states	300	42	119	68,300	200	936
Total United States	1,279	72	362	1,852,700	1,400	2,237

*From The Oil and Gas Journal and California office of the American Petroleum Institute. †Initial production for the East Texas Field calculated from field reports.

PRODUCTION OF CRUDE PETROLEUM BY STATES
(Thousands of barrels of 42 U. S. gallons)

	July, 1932		June, 1932		Jan.-July,	Jan.-July,
	Total	Dly. av.	Total	Dly. av.	1932	1931
Arkansas	1,032	33	993	33	7,030	9,508
California:						
Kettleman Hills	1,901	61	1,799	60	12,797	8,218
Long Beach	2,196	71	2,171	72	16,655	18,443
Santa Fe Springs	1,799	58	1,787	60	13,539	14,732
Rest of State	8,732	282	8,362	279	62,581	70,376
Total California	14,628	472	14,119	471	105,572	111,769
Colorado	94	3	98	3	727	925
Illinois	397	13	426	14	3,803	2,842
Indiana:						
Southwestern	71	2	75	3	495	473
Northeastern	2	....	3	....	19	33
Total Indiana	73	2	78	3	514	496
Kansas	2,855	92	2,736	91	19,977	21,731
Kentucky	549	18	535	18	3,581	3,720
Louisiana:						
Gulf Coast	935	30	909	30	6,480	5,417
Rest of State	864	28	855	29	5,813	7,887
Total Louisiana	1,799	58	1,764	59	12,293	13,304
Michigan	601	19	507	17	3,518	1,839
Montana	228	7	224	8	1,520	1,739
New Mexico	1,101	35	1,066	35	7,519	8,646
New York	297	10	308	10	2,135	1,854
Ohio:						
Central and Eastern	285	9	320	11	2,103	2,556
Northwestern	91	3	103	3	646	673
Total Ohio	376	12	423	14	2,749	3,229
Oklahoma:						
Oklahoma City	2,886	93	2,822	94	22,117	30,847
Seminole	3,636	117	3,501	117	26,150	31,659
Rest of State	6,553	212	6,582	219	44,423	53,165
Total Oklahoma	13,075	422	12,905	430	92,690	115,671
Pennsylvania	1,027	33	1,118	37	7,463	6,459
Tennessee	1	....	.....	....	4	5
Texas:						
Gulf Coast	3,490	113	3,300	110	22,659	30,112
West Texas	5,441	175	5,295	177	38,139	48,162
East Texas	10,444	337	10,340	345	71,561	48,653
Rest of State	7,321	236	7,186	239	50,587	56,284
Total Texas	26,696	861	26,121	871	182,946	183,211
West Virginia	319	10	357	12	2,332	2,595
Wyoming:						
Salt Creek	663	22	662	22	4,818	5,366
Rest of State	499	16	395	13	3,241	3,676
Total Wyoming	1,162	38	1,057	35	8,059	9,042
U. S. total	66,310	2,139	64,835	2,161	463,942	498,609

STOCKS OF CRUDE PETROLEUM
(Thousands of barrels of 42 U. S. gallons)

	July 31,	June 30,	July 31,
EAST OF CALIFORNIA:	1932	1932	1931
At refineries by location:			
East Coast: Domestic	9,655	8,817	10,138
Foreign	9,149	11,016	3,361
Appalachian	2,346	2,178	2,225
Indiana, Illinois, Kentucky, Michigan	3,966	3,981	3,033
Oklahoma, Kansas and Missouri	5,074	5,461	5,290
Texas: Inland	1,459	1,640	1,959
Gulf Coast: Domestic	6,846	7,296	7,212
Foreign	175	302	290
Louisiana Gulf Coast: Domestic	2,061	2,590	4,486
Foreign	1,895	1,991	682
Arkansas and Inland Louisiana	529	473	585
Rocky Mountain	1,586	1,658	1,786
Total	44,641	47,403	41,007
At refineries by origin:			
Pennsylvania grade	2,151	2,062	2,045
Other Appalachian (inc. Kentucky)	770	829	677
Lima-N. E. Indiana-Michigan	212	204	189
Illinois-S. W. Indiana	116	106	114
North Louisiana and Arkansas	1,389	1,561	2,423
West Texas and Southeast New Mexico	4,086	3,756	3,996
Oklahoma, Kansas, North Texas, etc.	18,752	19,302	19,075
Gulf Coast	4,522	4,681	6,369
Rocky Mountain	1,524	1,592	1,786
California	....	....	....
Foreign	11,219	13,309	4,333
Total	44,641	47,403	41,007
Pipe line and tank farm:			
Pennsylvania grade	4,929	4,957	5,234
Other Appalachian (inc. Kentucky)	895	817	944
Lima-N. E. Indiana-Michigan	1,265	1,328	1,456
Illinois-S. W. Indiana	11,103	10,859	9,920
North Louisiana and Arkansas	14,379	14,703	18,713
West Texas and Southeast New Mexico	31,123	30,909	38,785
Oklahoma, Kansas, North Texas, etc.	164,955	167,023	191,653
Gulf Coast	13,697	13,807	14,849
Rocky Mountain	25,243	25,189	23,456
Total	267,489	269,592	305,010
Total refinery, pipe line and tank farm	312,130	316,995	346,017
Producers'	5,850	5,850	5,553
Total crude east of California	317,980	322,845	351,570
CALIFORNIA: Light	40,405	40,938	43,625
Total refinable crude in the United States	358,385	363,783	395,195

NUMBER OF WELLS COMPLETED IN THE UNITED STATES*

	July, 1932	June, 1932	July, 1931	Jan.-July, 1932	Jan.-July, 1931
Oil	1,279	993	599	5,921	3,579
Gas	72	66	60	616	1,271
Dry	362	325	255	1,933	2,516
Total	1,713	1,384	1,014	8,464	7,366

*From The Oil and Gas Journal and California office of the American Petroleum Institute.

SHIPMENTS OF MOTOR FUEL BY PIPE LINES
(Thousands of barrels of 42 U. S. gallons)

	July, 1932	June, 1932	July, 1931	Jan.-July, 1932	Jan.-July, 1931
Motor fuel turned into lines	2,254	2,713	1,420	16,347	5,096
Motor fuel delivered from lines	2,228	2,879	1,270	16,127	3,906
Shortage	5	9	10	23	15
Stocks in lines and working tanks end of month	1,109	1,086	1,375	1,109	1,375

STOCKS HELD BY REFINING COMPANIES, JULY 31, 1932
(Thousands of barrels of 42 U. S. gallons)

	Gasoline				Gas oil and distillate fuels	Residual fuel oils
	At refineries	At bulk terminals	Total	Kerosene		
East Coast	6,367	11,811	18,178	1,254	2,585	5,602
Appalachian	1,562	553	2,115	263	663	470
Ind., Ill., Ky., etc.	*5,377	2,467	7,844	588	1,748	2,827
Okla., Kans., Mo.	†3,218	1,123	4,341	324	1,336	2,712
Texas Inland	1,779	78	1,857	151	442	3,084
Texas Gulf	3,987	254	4,241	1,406	2,426	6,610
Louisiana Gulf	1,632	471	2,103	328	688	4,088
Ark. and La. Inland	157	106	263	21	136	564
Rocky Mountain	1,873	....	1,873	220	242	396
California	13,007	(‡)	13,007	1,488	5,162	§94,256
Total	38,959	16,863	55,822	6,033	15,403	120,609

	Wax (thousands of pounds)			
	Lubricants	Crude scale	Refined	Total	Coke (tons)
East Coast	2,585	29,079	31,223	60,301	24,700
Appalachian	903	16,632	4,782	21,414	3,800
Ind., Ill., Ky., etc.	771	25,239	1,757	26,996	173,200
Okla., Kans., Mo.	509	3,648	1,708	5,356	191,800
Texas Inland	74	....	280	280	157,500
Texas Gulf	1,978	3,180	13,109	16,289	633,600
Louisiana Gulf	62	37,912	1,620	39,532	100,100
Ark. and La. Inland	15	.....	....	.. ..	200
Rocky Mountain	213	30,463	1,392	31,855	138,200
California	881	.....	....	.....	105,100
Total	7,991	146,153	55,870	202,023	1,544,200

	Asphalt (tons)	Road oil	Miscellaneous products	Unfinished oils	Natural gasoline
East Coast	159,500	38	77	8,841	36
Appalachian	27,000	79	42	1,622	1
Ind., Ill., Ky., etc.	69,400	254	*147	6,218	22
Oklahoma, Kans., Mo.	4,200	207	†16	3,159	13
Texas Inland	....	38	6	1,164	7
Texas Gulf	5,200	12	8	11,851	232
Louisiana Gulf	47,200	14	6	1,974	3
Ark. and La. Inland	19,200	10	7	625	4
Rocky Mountain	3,300	152	15	1,810	5
California	51,300	292	175	‖8,454	2,810
Total	386,300	1,096	499	45,718	3,133

*465,000 bbls. transferred from miscellaneous products to gasoline. †48,000 bbls. transferred from miscellaneous products to gasoline. ‡Included with "at refineries." §Includes heavy crude. ‖Includes 4,848,000 bbls. topa.

GASOLINE PRODUCTION BY THE VARIOUS METHODS—JULY, 1932
(Thousands of barrels of 42 U. S. gallons)

	Straightrun	—Per cent—		Cracked	—Per cent—		Nat. gasoline	Per cent†	Gasoline	Per cent*
	Total	(*)	(†)	Total	(*)	(†)	Total		Total	
East Coast	2,403	17.0	42.1	3,292	23.2	57.6	16	.3	5,711	40.3
Appalachian	730	24.7	50.0	701	23.7	48.0	30	2.0	1,461	48.4
Ind., Ill., etc.	2,968	31.5	50.7	2,790	29.7	47.7	96	1.6	5,854	61.2
Okla., Kans., Mo.	2,442	32.5	54.2	1,696	22.6	37.7	366	8.1	4,504	55.1
Texas Inland	1,380	32.8	60.5	724	17.2	31.7	178	7.8	2,282	50.0
Texas Gulf	2,357	18.2	40.1	3,186	24.5	54.3	329	5.6	5,872	42.7
Louisiana Gulf	549	17.1	38.8	747	23.2	52.8	118	8.4	1,414	40.3
Ark. and La. Inland	295	20.7	45.5	294	20.7	45.3	60	9.2	649	41.4
Rocky Mountain	296	21.7	42.8	314	23.0	45.4	82	11.8	692	44.7
California	3,008	21.1	57.1	1,461	10.3	27.8	797	15.1	5,266	31.4
Total	16,428	23.0	48.7	15,205	21.3	45.1	2,072	6.2	33,705	44.3

*Per cent of crude run. †Per cent of total gasoline output.

SHIPMENTS FROM CALIFORNIA TO EASTERN PORTS IN UNITED STATES*
(Thousands of barrels of 42 U. S. gallons)

	July, 1932	June, 1932	July, 1931	Jan.-July, 1932	Jan.-July, 1931
Gasoline	934	1,340	921	5,467	8,411
Natural gasoline	....	72	216	217	1,021
Kerosene	....	50	28	131	164
Gas oil and Diesel oil	144	111	....	523	1,140
Fuel oil	....	....	107	....	2
Lubricants	9	....	....	28	63
Asphalt	1	1	10	6	11
Miscellaneous	15	14	1	55	....
Total	1,103	1,588	1,283	6,427	10,812

*Compiled by E. T. Knudsen of the San Francisco office of the Bureau of Mines.

PRODUCTION OF CRUDE PETROLEUM BY FIELDS
(Thousands of barrels of 42 U. S. gallons)

FIELD:	July, 1932 Total	July, 1932 Dy.av.	June, 1932 Total	June, 1932 Dy.av.	Jan.-July, 1932	Jan.-July, 1931
Appalachian:						
Pennsylvan'a Grade	1,785	58	1,948	65	12,972	12,205
Other (including Kentucky).	693	22	690	23	4,646	4,984
Lima, northeast Indiana, Mich.	694	22	613	20	4,183	2,535
Illinois-southwest Indiana	468	15	501	17	3,498	3,315
Mid-Continent:						
North Louisiana and Arkansas	1,896	61	1,848	62	12,843	17,395
West Texas-S.E. New Mexico	6,504	210	6,329	211	45,727	56,527
Other (Okla., Kans., N. Tex., etc.)	33,695	1,087	33,167	1,105	234,815	242,339
Gulf Coast	4,425	143	4,209	140	29,139	35,529
Rocky Mountain	1,522	49	1,411	47	10,547	12,011
California	14,628	472	14,119	471	105,572	111,769
Total	66,310	2,139	64,835	2,161	463,942	498,609

PRODUCTION AND DISTRIBUTION OF NATURAL GASOLINE
(Thousands of barrels of 42 U. S. gallons)

	July, 1932 Total	July, 1932 Daily av.	June, 1932 Total	June, 1932 Daily av.	Jan.-July, 1932	Jan.-July, 1931
Production	2,812	91	2,812	94	21,493	26,938
Decrease in all stocks	2	....	373	12	.....	.....
Total	2,814	91	3,185	106	21,493	26,938
Blended at refineries	1,964	63	1,993	67	13,717	20,383
Blended at plants east of Calif.	3	....	3	....	23	96
Run through pipe lines in Calif.	108	4	100	3	774	601
Jobbers, exports, etc.	500	16	600	20	3,307	2,300
Increase in all stocks	....	....	....	....	1,072	611
Balance	239	8	489	16	3,600	2,947
Total	2,814	91	3,185	106	21,493	26,938

PRODUCTION OF MOTOR FUEL
(Thousands of barrels of 42 U. S. gallons)

	July, 1932 Total	July, 1932 Daily av.	June, 1932 Total	June, 1932 Daily av.	Jan.-July, 1932	Jan.-July, 1931
Straightrun gasoline	16,428	530	16,775	559	116,898	126,122
Cracked gasoline	15,205	490	14,444	481	99,119	99,627
Natural gasoline:						
Blended at refineries	1,964	63	1,993	67	13,717	20,383
Blended at plants*	3	....	3	....	23	96
Run through pipe lines†	108	4	100	3	774	601
Jobbers, exports, etc.	500	16	600	20	3,307	2,300
Benzol produced	80	3	81	3	705	1,171
Total motor fuel	34,288	1,106	33,996	1,133	234,543	250,301

*East of California. †To refineries in California.

RUNS TO STILLS AND OUTPUT OF REFINERIES, JULY, 1932
(Thousands of barrels of 42 U. S. gallons)

	Crude oil			Unfinished oils	Natural gasoline	Total input
Input—	Domestic	Foreign	Total			
East Coast	10,299	3,858	14,157	795	18	14,971
Appalachian	2,957	.....	2,957	236	30	3,223
Indiana, Illinois, Kentucky, etc.	9,410	.....	9,410	330	96	9,836
Oklahoma, Kansas, Missouri	7,516	.....	7,516	360	366	8,242
Texas inland	4,209	.....	4,209	115	178	4,502
Texas Gulf	12,868	118	12,986	650	329	13,965
Louisiana Gulf	3,111	105	3,216	50	118	3,384
Arkansas and Louisiana inland	1,422	.....	1,422	238	60	1,770
Rocky Mountain	1,365	.....	1,365	182	82	1,629
California	14,217	.....	14,217	476	*797	15,490
Total	67,374	4,081	71,455	3,485	2,072	77,012

	Gasoline	Kerosene	Gas oil and distillate fuels	Residual fuel oils	Lubricants	Wax (thous. lbs.)
Output—						
East Coast	5,711	507	995	4,491	573	14,280
Appalachian	1,461	277	82	244	366	5,330
Indiana, Illinois, Kentucky, etc.	†5,854	327	475	961	135	5,040
Oklahoma, Kansas, Missouri	‡4,504	552	461	1,336	211	2,520
Texas inland	2,282	176	152	1,368	21	280
Texas Gulf	§5,872	737	1,303	3,238	472	1,120
Louisiana Gulf	1,414	314	186	790	23	3,920
Arkansas and Louisiana inland	649	52	138	483	16	.....
Rocky Mountain	692	46	66	354	15	—840
California	5,266	641	1,333	6,261	121	.....
Total	‖33,705	3,629	5,191	19,526	1,958	31,640

Output (continued)—	Coke (tons)	Asphalt (tons)	Road oil	Still gas	Miscellaneous	Unfinished products	Shortage
East Coast	16,300	133,500	40	824	4	648	395
Appalachian	5,300	9,500	20	225	17	311	122
Indiana, Illinois, Kentucky, etc.	58,000	26,600	608	774	—442	577	107
Oklahoma, Kansas, Missouri	22,900	2,700	254	333	—41	166	325
Texas inland	6,300	.....	46	107	6	94	217
Texas Gulf	29,800	10,900	9	889	5	1,008	216
Louisiana Gulf	5,700	14,200	33	124	231	27	131
Arkansas and Louisiana inland	200	2,500	40	44	1	262	70
Rocky Mountain	7,800	500	126	68	—2	188	26
California	200	33,600	224	375	51	568	474
Total	152,500	234,000	1,410	3,763	—170	3,829	1,983

*Includes 108,000 bbls. run through pipe lines. †Includes approximately 1,000,000 bbls. previously classified as miscellaneous. Of this amount 465,000 bbls. were transferred from stock and 535,000 bbls. were produced in July. ‡Includes approximately 160,000 bbls. previously classified as miscellaneous. Of this amount 48,000 bbls. were transferred from stock and 52,000 bbls. were produced in July. §Includes 444,000 bbls. special naphthas east of California.

Cracking operations.—Fresh cracking stocks charged to cracking stills 23,807,000 bbls. Amount of gasoline produced by cracking 15,205,000 bbls. Amount of fuel oil produced by cracking 11,375,000 bbls.

IMPORTS AND EXPORTS OF CRUDE PETROLEUM AND MAJOR REFINED PRODUCTS*
(Thousands of barrels of 42 U. S. gallons)

	July, 1932	June, 1932	July, 1931	Jan.-July, 1932	Jan.-July, 1931
CRUDE PETROLEUM:					
Imports	1,525	7,869	3,588	33,769	29,097
From Mexico	61	1,065	827	5,843	4,992
From Venezuela	1,240	4,545	2,195	19,350	15,745
From Colombia	145	2,180	504	7,613	7,395
From other countries	79	79	62	963	965
Exports	2,249	2,791	2,621	16,428	14,474
Domestic crude oil:					
To Canada	1,593	1,738	3,092	11,397	11,249
To other countries	656	1,053	529	5,028	3,225
Shipments	....	....	....	3	....
REFINED PRODUCTS:					
Gasoline:					
Imports	64	1,209	1,528	7,698	8,561
Exports†	2,363	3,521	4,473	23,614	28,256
To United Kingdom	276	987	1,109	7,388	8,947
To France	412	384	592	3,037	3,466
To Canada	240	236	317	1,291	1,762
To other countries	1,276	1,849	2,291	11,004	13,306
Shipments	159	65	164	894	775
Kerosene:					
Exports	876	1,074	1,235	6,273	7,344
To China	137	204	230	775	1,055
To United Kingdom	292	188	377	1,654	1,741
To other countries	429	676	607	3,727	4,437
Shipments	18	6	21	117	111
Gas oil and fuel oil:					
Imports	816	2,346	1,886	15,283	14,053
Exports	1,217	1,391	2,699	12,892	18,036
To Japan	399	208	453	3,405	3,246
To Chile	....	3	194	174	1,928
To other countries	752	979	1,866	7,931	11,117
Shipments	66	201	166	1,382	1,746
Lubricants:					
Exports	279	725	535	4,207	4,619
To United Kingdom	16	129	120	1,024	951
To France	51	149	76	621	748
To other countries	202	442	330	2,514	2,870
Shipments	10	5	9	48	50
Wax (thousands of lbs.):					
Imports	2,184	2,151	2,537	24,534	18,251
Exports	14,032	12,439	17,284	118,745	152,670
To United Kingdom	2,719	3,523	3,871	33,688	33,683
To Italy	1,542	1,517	709	15,918	25,316
To other countries	9,699	7,399	12,703	69,055	93,655
Shipments	72	....	1	84	16

*From the Bureau of Foreign and Domestic Commerce. †Includes benzol—exactly 130 bbls. in July, 1932.

INDICATED DOMESTIC DEMAND FOR CRUDE PETROLEUM EAST OF CALIFORNIA
(Thousands of barrels of 42 U. S. gallons)

Domestic pet. by fields of origin:	July, 1932 Total	July, 1932 Dy.av.	June, 1932 Total	June, 1932 Dy.av.	Jan.-July, 1932	Jan.-July, 1931
Appalachian:						
Pennsylvania Grade	1,724	56	1,902	63	12,508	12,831
Other (including Kentucky).	674	22	714	24	4,859	5,059
Lima, northeast Indiana, Mich.	760	24	641	21	4,526	3,442
Illinois-southwest Indiana	214	7	288	10	2,199	3,624
Mid-Continent:						
North Louisiana and Arkansas	2,591	83	2,411	80	16,009	20,734
West Texas-S.E. New Mexico	5,956	192	6,818	227	49,189	64,557
Other (Okla., Kans., N. Tex., etc.)	36,329	1,172	35,891	1,197	248,557	241,624
Gulf Coast	4,671	151	4,422	148	29,224	39,696
Rocky Mountain	1,548	50	1,061	35	8,850	13,663
California	.....	.....	.....	.....	.....	5
Total demand	54,457	1,757	54,148	1,805	375,920	404,234
Exports	1,513	49	2,050	68	10,616	9,779
Domestic demand	52,944	1,708	52,098	1,737	365,304	394,454
Foreign petroleum	3,615	117	6,894	230	27,044	28,617
Total domestic demand east of California	56,559	1,825	58,992	1,967	392,348	422,073

East Texans Urge Action Against Overproduction

FORT WORTH, Tex., Sept. 5.—Several Fort Worth oil men propose attending the landowners' mass meeting scheduled in Kilgore Wednesday. The meeting at Kilgore was called after a group of 50 landowners in the East Texas Field assembled Saturday at London, in western Rusk County.

It is probable that landowners attending the Kilgore meeting will take action on a resolution adopted at the London meeting calling on the Railroad Commission to take immediate steps to stop illegal oil production in the East Texas Field.

Preceding adoption of the resolution, which also called for strict enforcement of the order requiring all pipe lines to install meters and to send experienced men for supervision or ask the governor for additional troops, it was suggested that if the landowners cannot get relief from the Railroad Commission the legislature be asked for an investigation.

Landowners, who are interested in the field as royalty owners, registered a protest against the recent allowable increase, which they said would not only disrupt values and demoralize the market, but was made in the face of an abundance of testimony reciting that physical waste would be greater.

One Fort Worth oil man said he intended to wire the committee of landowners arranging the Wednesday meeting suggesting that the attorney general and Railroad Commission be asked to have special representatives present to hear the discussions.

OIL AND GAS POOL MAPS

"The most valuable map I have seen in years" is the way one oil company executive expressed his opinion of the large wall map in colors showing all oil and natural gas pools in the United States which The Oil and Gas Journal compiled and published recently. Oil and natural gas company officials and others interested in the petroleum industry find The Oil and Gas Journal map to be of especial value because the pools are numbered and the numbers listed by states with names of the pools. There are more than 1,100 names of pools on the map and these, being listed by states, make it easy to locate any pool in the United States. The map, printed on especially heavy bond paper and measuring 36"x48", may be procured from The Oil and Gas Journal for $2. It is given free with each new subscription.

LAYING LINE IN IOWA

The Iowa-Nebraska Light & Power Co., Lincoln, Nebr., subsidiary of the United Light & Power Co., Davenport, Iowa, is laying approximately 28 miles of 4½-inch O.D. and 7,000 feet of 6⅝-inch O.D. Republic steel line pipe from a point near Red Oak, Iowa, southwest to Shenandoah, Iowa, and is doing some town plant work as well in these towns. Manufactured gas plants will be shut down within the next few weeks and straight natural gas will be used. All pipe is protected against corrosion and has been coated and wrapped at the steel mill by the Hill, Hubbell & Co. process.

Late Fields

KANSAS

Shell Petroleum Corp. and others' No. 1 Nickel, NE cor. SW, Section 33-21-3w, is a new location about 1½ miles south of production in the Voshell Pool in McPherson County, Kansas. The test is located on a short term lease.

The Home Natural Gas Co. is erecting a compressor station in the town lot field at Winfield, in Cowley County. The work is preparatory to the company taking gas from the wells on the townsite. Some of the wells have shown considerable gas.

H. C. Eisenhour and others' No. 1, SW cor., Section 5-24-12, in the trend southeast of Hamilton, Greenwood County, found oil in the Bartlesville sand at 1,729-43 feet. Oil rose 400 feet in the hole over night. It will be given a shot before being completed. It is estimated at 200 bbls. daily.

Theta Oil Co.'s No. 7 Shaffer, SW cor. SE, Section 31-25-14, Woodson County, made 125 bbls. of oil from the Bartlesville sand at 1,550-83 feet. The well also made 2,000,000 feet of gas.

W. E. Stringer and others' No. 1 Schwindler, in Section 2-25-11w, Stafford County, has spudded.

Mid-Kansas Oil & Gas Co.'s No. 1 Converse, SW cor. NE NE, Section 30-24-18w, Edwards County wildcat, was shut down at 4,760 feet, with no showings of oil. It is believed the company plans to drill the test to the Siliceous lime.

Detrich and others' No. 1 Dalke, NW cor. SE, Section 16-19-1, McPherson County wildcat, found the top of the chat at 2,877 feet. A showing of gas was found at 2,897 feet. It was drilling deeper at 2,898 feet.

Skelly Oil Co.'s No. 1, C SE SW, Section 20-27-10w, Kingman County, wildcat well, had the hole plugged back to 4,182 feet, and was testing at that depth. It was drilled to a total depth of 4,195 feet in the Siliceous lime where it made oil, gas and water.

Barnsdall Oil Co.'s No. 1, C NW NE, Section 34-23-4w, Reno County, flowed 5 bbls. of oil and 5 bbls. of water from the chat at 3,280-3,360 feet. The gas was estimated at 6,000,000 feet a day.

OKLAHOMA

Sovereign Oil Co.'s No. 1 Flowers, SW cor. SE SE, Section 14-12-3, Lincoln County, was spudding. The well is a community test with the Sovereign Oil Co., H. F. Wilcox Oil & Gas Co., The Texas Company, Indian Territory Illuminating Oil Co., Twin State Oil Co., Amerada Petroleum Corp., Red Bank Oil Co., Continental Oil Co., Mid-Kansas Oil & Gas Co., J. M. Kessler and Wofford Drilling Co., all interested.

Latest wells completed in the Oklahoma City Field include Indian Territory Illuminating Oil Co.'s No. 8 M.K.T., NE cor. NW SW SW, Section 35-12-3w, in the north end of the field, flowed 245 bbls. of oil in 3½ hours through a 7-inch choke, from sand at 6,240-6,334 feet.

Phillips Petroleum Co.'s No. 1 Fish, SW cor. NE SW, Section 15-11-3w, was bailed in but no gauge was taken. The oil was found in sand from 6,395 to 6,520 feet. The well extends the producing area a quarter of a mile west.

Wentz Oil Co. and others' No. 1 Wolff, C SE NW, Section 17-20-2w, Noble County wildcat, found a showing of gas in the top of the Mississippi lime at 5,014 feet. The crew was landing 8-inch casing at 5,070 feet. It will be several days before the test resumes drilling.

Magnolia Petroleum Co. has made a location for No. 1 Billington, NW cor. SW, Section 36-7-4, Pottawatomie County.

Sinclair Prairie Oil Co.'s No. 1 Kennedy, C SE NW, Section 4-13-1w, Oklahoma County wildcat, reported the top of the Oswego lime at 5,247 feet, which is considerably higher than wells in the Oklahoma City Field find this same formation. It is also running higher than the wildcat test of Slick and others, No. 1 Martin, in Section 13-13-1w, found this same formation. It was drilling deeper at 5,484 feet on the last report.

Trowbridge and others' No. 1 Price, SW cor. NE NE, Section 30-2-9w, Comanche County wildcat, was coring at 1,625 feet. It found saturated sand at 1,618-24 feet. It is expected to be drilled deeper to around 1,650 feet before making a drill stem test of the oil showing.

SOUTHWEST TEXAS

SAN ANTONIO, Tex., Sept. 6.—Coquat and Hawn's No. 1 Harris, south offset to the discovery well in New Tuleta Field in Bee County, made 16 bbls. of oil in 12 hours ending at 7 o'clock this morning on forty-two sixty-fourths inch choke with 50 pounds on tubing and 125 pounds on casing. The Texas Company's west offset to the discovery made gas; O'Neil's east offset drilled too deep and got water; and Coquat and Hawn's south offset making such a small well is discouraging.

PANHANDLE PIONEER DIES

AMARILLO, Tex., Sept. 5.—George H. Williams, 62, pioneer oil man and one of the developers of the Panhandle oil field, died Monday near Bovina where he had gone eight months ago, seeking to regain his health.

Mr. Williams first was associated with the oil industry in India nearly 35 years ago. Following a 10-year period in India, Mr. Williams went to California where he remained in the industry for 12 years. He came to Amarillo in 1920 as a driller, bringing in several wells for various companies. In 1926 he organized several companies. He was an independent operator at the time of his death. Surviving are the widow and a brother, Guy Williams, oil operator in Arabia.

OUSTER HEARING POSTPONED

AUSTIN, Tex., Sept. 5.—Attorney General James V. Allred said today that taking of preliminary testimony in the antitrust oil ouster suit would not be resumed until probably the first week in October. It had been planned to resume the hearings before Special Commissioner George Shelley today. Mr. Allred said the postponement was caused by the illness of Clarence Wharton, one of the defense attorneys.

NEW DRILLING AT HILDESHEIM

The German company known as "Gewerkschaft Niederblech," which is operating with American capital, has recently spudded in at Sehnde the third deep test for oil. Although both the earlier tests, in the neighboring municipality of Ummeln, have been suspended, hopes are entertained concerning the third. It is situated on the so-called "Teerkuhlen," about one kilometer southeast of Sehnde, and is being drilled by the firm known as Sieb-Koln. In the last century several boreholes drilled to shallow depth in this neighborhood were producers.

MAGNETIC STORM

The Tucson, Ariz., observatory of the U. S. Coast and Geodetic Survey reports a severe magnetic storm began at 2 p.m. (C.S.T.) on August 27 and ended at 5 p.m. (C.S.T.) August 31. Its telegrams read:

"Storm began twenty-seventh. Twenty. Severe."

"Storm ended thirty-first. Twenty-three."

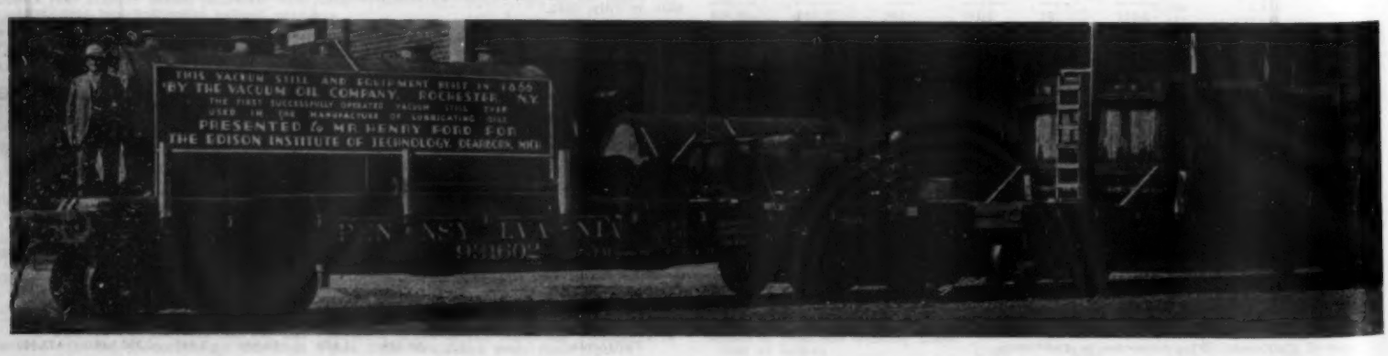
First Vacuum Still Is to be Restored by Henry Ford Museum Near Detroit

The first vacuum petroleum still has been unearthed and is to be set up in Dearborn, Mich., near Detroit, by the Edison Institute of Technology. The still is a gift of the Vacuum Oil Co., Inc., to Henry Ford for inclusion in the institute's collection. It will be erected among the relics of the young United States, along with the laboratory where Thomas A. Edison discovered the electric light and many famous landmarks of American mechanical progress.

The still was the result of the first application of true scientific principles to the manufacture of petroleum lubricants. The still has been shipped to Detroit from Rochester, N. Y., where it has laid unused for 40 years, the Vacuum organization having preserved it as a memento. At Dearborn, it will be installed in the same form in which it ran the first batch of petroleum ever refined commercially by the vacuum process.

The original vacuum still has a 30-bbl. capacity. It was erected by Hiram B. Everest, founder of the Vacuum Oil Co., in Rochester, N. Y., in 1866. The original still was soon outgrown. It was transformed into a storage tank and was so used for several years.

Dr. Florus R. Baxter, chief of the company's testing laboratories, who has been connected with the company more than 50 years, will supervise restoration of the still. Co-operating with him in this effort are August J. Goebel, a head stillman for 42 years, with a total of 59 years in the service of the company, and recently retired on a pension, and Richard King, a foreman bricklayer who retired on a pension in 1928 after 52 years in service.



SERVICE ON NEW FIELDS

McPHERSON COUNTY FIELDS, McPHERSON COUNTY, KANSAS

Compiled by The Oil and Gas Journal, Sept. 3, 1932

LOCATION OF FIELD

Approved name.

There are three oils pools and one gas field in McPherson County, Kansas, known as the Ritz-Canton, Voshell and Johnson Pools and the Decker gas field. The Johnson Field is sometimes known as the Door Step Pool.

Geographic location.

McPherson County is located in the central part of Kansas, about 150 miles west and 50 miles south of Kansas City and 35 miles north of Wichita.

Principal cities and towns near the fields.

McPherson, county seat, is located near the center of the developments thus far. Canton is located on the east edge of the Ritz-Canton Field and Galva is located south of the Decker gas field.

Cities and towns where supply houses have branches.

The oil and gas fields are served by supply houses located at McPherson and Wichita Kans. Good roads leasing to the fields permit material to be delivered there by truck from more distant points.

Railroads serving the area.

The Missouri Pacific, Union Pacific, Rock Island and Santa Fe railway systems have main trunk lines passing through McPherson County east and west with branches connecting north and south. Canton, Galva and McPherson are located on the Santa Fe and Rock Island lines.

Types of sites available for supply branches.

Land may be secured for warehouse sites from the right of way or land departments of the railroads, or it may be secured from owners of land located along the railway rights of way. McPherson is centrally located to serve all pools in the district and is the natural distributing center.

Types of warehouses.

This country is cold enough in the winter to require tight buildings and it is common practice to erect wooden or steel frames and cover them with corrugated iron for the storeroom section. For the offices and sleeping quarters the building is finished inside and made weather tight and must be heated in the winter. The front portions of the warehouse buildings are sometimes built two stories high, the upper part being used for sleeping quarters for company men. Some companies have adopted standardized sectionalized steel frame warehouses for use in this area.

Character of roads.

State highway No. 50 extending east and west throughout the state passes through the townsite of McPherson. This is a surfaced road. State highway No. 81 running north and south also passes through McPherson and is also paved. Other roads are graded and graveled and nearly all roads in the area are of the all weather surface type and kept open in winter by removing snow.

Type of country.

This portion of Kansas is prairie land with very little natural timber. It is gently rolling land, somewhat sandy. It is considered excellent for farming and the majority of the land is under cultivation. Wheat is the principal product.

Trucking and hauling facilities.

Several companies are doing this kind of work and operate out of Wichita, but considerable material has been moved to locations on oil company trucks.

Hotel and other accommodations.

There are good hotels in McPherson, Newton, Hutchinson and Wichita. Modern houses are available in all of these towns for oil field workers.

Electric power and gas companies.

Gas in the entire county is supplied by the McPherson Oil & Gas Co. Water and electric light are supplied by municipally owned plants, in McPherson.

Domestic water supply.

Each of the towns named above have local water systems and there is also a good supply of water to be had from wells sunk to a depth of about 120 feet.

Schools and churches.

All the towns in this area have good public school systems, also churches representing the leading denominations. High schools and colleges are also located conveniently in adjacent cities.

Pipe lines.

The Ritz-Canton Field has been prorated since its discovery. Pipe line companies with lines into the pool, include White Eagle Oil Corp., Phillips Petroleum Co., Shell Pipe Line Co., Dickey Oil Co., Skelly Pipe Line Co., Stanolind Pipe Line Co. and Texas-Empire Pipe Line Co.

The Voshell Pool has the following pipe lines, Barnsdall Oil Co., Derby Oil Co., Texas-Empire Pipe Line Co., Skelly Oil Co., Shell Pipe Line Co. and Sinclair Prairie Pipe Line Co.

The Johnson Pool has only one pipe line at the present time, that of the Shell Pipe Line Co.

GEOLOGICAL DATA

General geology.

The McPherson County fields, consisting of the Ritz-Canton gas and oil field, the Johnson Pool, sometimes called the Door Step Pool, and the Voshell Field, are located in an area covered on the surface with a mantle of quaternary loess, sand and alluvium, which made surface geological work impossible.

The discovery of these fields was due to an intensive core drilling campaign by several of the major companies. The Herrington limestone of Permian age, which is found at a depth of about 500 to 700 feet, was used as a marker in mapping these structures.

The Voshell Field, located 6 miles south of McPherson in Township 21s,Range 3w, and the new Johnson Pool a mile east of the city, are on the same structural trend. This sharp line of folding continues on south and slightly west to the Burrton Field, in Township 23s, Range 4w, Reno County. It is parallel to and probably contemporaneous with the Granite Ridge or Nemeha Mountain folding.

The Ritz-Canton Field, 8 miles due east of McPherson, is located on a separate line of folding from that of the Johnson and Voshell Fields. This structure has a general north south axis but branches at the north end to form a northwest and northeast extension. The northwest extension builds up to form a closed dome, on which the Decker gas field has been developed.

The Ritz-Canton structure is not as sharply folded as the Voshell Field but covers a much larger area. The structure has less than 40 feet of closure on the Viola lime.

The Voshell Field produces principally from the Wilcox sand and Siliceous lime of Ordovician age. A few extension wells on the south and north end of the field are producing from the Mississippi chat only. In this field the Mississippi chat is found at a depth of from 2,950 to 3,000 feet, the Wilcox sand from 3,250 to 3,400 feet, and the Siliceous lime at an average depth of about 65 feet below the Wilcox sand. The Wilcox horizon is productive lower down on the flanks of the structure than the Siliceous lime. The structure has a closure of over 100 feet, as contoured on the Viola lime or Wilcox sand. The Viola lime does not produce in this field.

The new Johnson Field just east of McPherson covers a small area and produces only from the Mississippi chat. The top of this structure has not been tested in the Ordovician horizons.

The Ritz-Canton Field is productive in the Mississippi chat, 2,900 to 2,960-foot, and the Viola lime, 3,350 to 3,450-foot, horizons. Several edge wells that failed to make commercial producers in either of these horizons have been deepened to the Wilcox sand but with negative results. The northwest extension produces only from the Mississippi chat, but no wells have been drilled to the Ordovician horizons on top of this gas producing dome. A few wells around the edge of the dome have made small producers in the Mississippi chat. Production from the Mississippi chat is governed by porosity of the lime and structural position of the well. Wells vary in size from a few barrels initially to more than 5,000 bbls. Production from the Ordovician Viola lime wells seems to be governed more by the porosity of the lime than by structure. The highest Viola lime wells in the field are found in

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Even a half day's fishing job will now cost more than a new bit. Don't take a chance with a short bit—one that has had the pin turned on several times, or one of unknown quality that may be crystallized when you can buy new, highest quality Bridgeport Bits at these astounding prices.

Just think, a set of two of our new, 5 3-16" bits cost you only about $38.00; a 15½" new bit costs you only about $75.00. Study carefully the table of sizes and prices below—then SEE YOUR NEAREST BRIDGEPORT STORE FOR YOUR BIT NEEDS.

Size	Pins	Collar Diameter	Approximate Length Over All	Approximate Weight Each	Price Per Lb.
5-3-16"	2"x3"	4-¼"	7' to 7'8"	246 lbs. to 276 lbs.	
6-¼"	3-¼" also 3-½"	4-¼" also 4-½"	8' to 8'1"	401 lbs. to 416 lbs.	7c
6-⅝"	3-¾"	5-¼"	7'5" to 8'2"	421 lbs. to 466 lbs.	
8-¼"	4-¼"	6-¼"	7'8" to 8'	700 lbs. to 860 lbs.	
10"	4"x5"	7"	7'8" to 8'	1078 lbs. to 1210 lbs.	5c
12-½"	4"x5" also 4-¼"x6"	7" 8-¼"	7'1" to 8'	1365 lbs. to 1635 lbs.	
15-½"	4"x5" also 4-¼"x6"	7" 8-¼"	7' to 7'10"	1990 lbs. to 2434 lbs.	
18"	4"x5" also 4-¼"x6"	7" 8-¼"	6'10" to 7'	2186 lbs. to 2810 lbs.	3c

All Used Bits—Sizes 5 3-16—6¼—6⅝ at **3c** Per Lb.

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SERVICE ON NEW FIELDS

McPherson County Fields, McPherson County, Kansas

(Continued from Preceding Page)

the northeast extension near Canton, but the wells have been small.

DEVELOPMENT

Discovery of the fields.

Shell Petroleum Corp.'s No. 1 Ritz, NW cor. SE SW, Section 1-20-2w, was the discovery well in the Ritz-Canton-Decker Field. It was completed July 10, 1929, for 1,090 bbls. from the chat at 2,935-66 feet. The discovery well in the Voshell Pool was Ted Washabaugh and W. C. McBride, Inc.'s No. 1 Voshell, NE cor., Section 9-21-3w. It was completed August 29, 1929, with an initial production of 40 bbls. daily from the Simpson sand at 3,301-04 feet. The discovery well in the Johnson Pool was Shell Petroleum Corp.'s No. 1 Johnson, in Section 35-19-3w. It is estimated from 300 to 500 bbls. daily from the chat at 2,984-3,046 feet.

Prior to the discovery of commercial production in the county considerable geological work was done as well as core drilling. A number of wildcat wells were drilled around the Voshell and Ritz-Canton areas before the discovery wells were completed.

Number of operations August 31.

On August 31 there were 25 wells drilling in the Ritz-Canton-Decker Field, 4 in the Voshell Pool, 7 in the Johnson Pool, and 4 scattered tests, a total of 40 drilling wells in the county. In addition there were 9 derricks up and 7 locations made in the county.

Future activity.

Many of the leases in the south end of the Voshell Pool, are nearing expiration date and a large number of these will be drilled to protect the leaseholders' interest. The development of the Johnson Pool is just beginning and only nine wells have been completed. These will insure extensive drilling operations during the next few months. The Ritz-Canton Pool is only partly developed and although the market outlet is curtailed, considerable new development is being forced.

DRILLING CONDITIONS

Drilling water.

Plenty of water for drilling purposes is available in all the fields from shallow wells, which can be drilled at low cost. This water is noncorrosive and does not need treating. Several small creeks that traverse the area can supply water, but it is not necessary to depend on these because of the plentiful supply of shallow well water from 200 to 275 feet.

Boiler fuel.

Oil was used for fuel in drilling the discovery well in the Voshell Pool, but an abundant supply of gas is now available. The first few wells in the pool found a large volume of gas in the chert (commonly called "chat") formation. The first well drilled in the Ritz-Canton Pool, used gas for fuel from the Decker gas field, to the northwest of the discovery well. The Decker gas field has an abundant supply of gas available for fuel at drilling wells. The cost of the fuel varies with the distance from the source of supply to the drilling well. Where no long pipe line is necessary the cost of the gas is about $20 per day for cable tool wells and about $90 per day for rotary drilled wells.

How wells are drilled.

All the wells in the Voshell, Ritz-Canton and Johnson Pools have been drilled by contract.

Drilling time to complete wells.

In the Voshell Pool, the average drilling time of a cable tool test is 60 days and of a rotary tool test about 35 days. The average time of a Viola lime test in the Ritz-Canton Pool is about the same as the wells in the Voshell Pool. Wells in the Johnson Pool require about 35 days to reach the chat formation.

Types of drilling equipment.

In all of the different fields some electrically driven rotary outfits have been used and some regular steam rotary rigs, and also standard cable tools. The percentage is estimated at 70 per cent rotary and 30 per cent cable tools in all the fields in the county. Two and four 100-horsepower boilers are used at the rotary rigs and one 60-horsepower boiler at a standard tool rig.

Electric power.

Lights and power for the development of the field work are furnished by the United Power & Light Corp. This corporation owns the only power line in the area and to date only supplies power to the Ritz-Canton-Decker Field.

All derricks in the fields are steel the rotary being 122 feet and the standard 84 feet.

Type bits and drill stem.

Rock cone bits have been used throughout the fields on all the rotary rigs. Fishtail bits have not been used so far. Drill stem is 4-inch.

Drilling mud.

Natural mud made in drilling is all that has been needed in the fields so far excepting that admixtures have been used in extreme cases, where a large pocket of gas was found.

Method of production.

All wells can be produced as the operator sees fit. Most of the wells in all the pools flow when first completed. All production must be reported to the umpire or agent of the Kansas Public Service Commission.

Gas-oil ratios.

There are no fixed gas-oil ratios established by the Public Service Commission in any of the fields at the present time.

Character of oil.

The gravity of the oil in the Ritz-Canton-Decker Field varies. The "chat" formation produces oil of 34 to 37 gravity, A.P.I., and the Viola lime oil of 37 to 41 gravity, A.P.I. The oil from the Simpson formation in the Voshell Pool, is 38 to 41 gravity, A.P.I.

Separators and tankage.

All leases are equipped with low-pressure separators. Field tanks range from 250 to 500 bbls. capacity, the majority using 250-bbl. tanks. Batteries usually consist of four 250-bbl. tanks in all the fields.

Well head pressures.

Working pressures on the wells range from 400 to 1,100 pounds.

Bottom hole pressures.

No bottom hole pressure records are available at this time in any of the fields.

Salt water conditions.

Salt water is found in practically all the oil wells in the Ritz-Canton and Decker Fields. There is no evidence of salt water in the Johnson Field to date. All the 103 wells in the Voshell Field make some salt water.

Paraffin.

None.

Cut oil.

Some wells in the Voshell and Ritz-Canton-Decker Fields are producing cut oil which is treated at the leases. Each operator has his own method of treating the cut oil.

Are wells shot?

Some of the wells in the Voshell Field have been shot in the Simpson formation and some of the Viola lime wells in the Ritz-Canton-Decker Field have been given a shot.

Gasoline plants.

There are no gasoline plants in any of the fields to date, but it is believed that several are contemplated.

Casing.

Wells so far completed have set and cemented the 8-inch casing in the Ritz-Canton Pool, but not in the Voshell or Johnson Pools. In the Voshell, Ritz-Canton and Johnson Pools, the following casing is used, 20-inch surface pipe at 120 to 180 feet; 700 feet of 15½-inch; 1,300 feet of 12½-inch; 2,200 feet of 10-inch in the Ritz-Canton Pool, and in the Voshell Pool, 2,400 feet of 10-inch; 2,900 to 3,000 feet of 8-inch, 3,300 feet of 6-inch, and 3,550-3,660 feet of 5-inch casing.

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McPherson County Fields, McPherson County, Kansas

(Continued from Preceding Page)

Cementing casing.

Casing is cemented in all wells in the Ritz-Canton Pool, on top of the chat formation.

Rig builders and contractors.

Derrick and rig builders and contracting firms available as well as a number of independent contractors. The majority of these firms are located in Wichita.

PRODUCTION PRACTICE

General.

The Johnson Field is in the early stages of development and few of the wells have yet made a full 24-hour production gauge, on account of the lack of a market demand and the pipe line shortage. Completions in the Johnson Field have been limited to eight wells. The Voshell Field is practically drilled with the exception of the south extension area which is now being developed. The Ritz-Canton-Decker Field is still being developed although it is believed to be defined on the north, east and south, with the Decker gas field on the west. All wells in this field are under strict proration, and those in the Johnson Field are curtailed, while the production in the Voshell Field is allowed its full capacity.

Proration restrictions.

The Voshell Pool has no proration restrictions, while the Ritz-Canton-Decker Field is now being prorated as follows: the Viola lime wells are allowed to produce 7 per cent of their potential daily production; the chat wells are allowed to produce 6 per cent of their potential daily production. The Johnson Field has a daily allowable of 50 bbls. per well.

Completion of wells.

There is no restriction on the completion of wells in any of the fields.

Method of completion.

The wells are completed as each operator wishes, as it is not necessary to use any prevention or chokes.

GENERAL CONDITIONS

Initial production.

The initial production of wells varies in the different pools. The average daily production from wells producing from the Simpson lime formation in the Voshell Pool was 1,000 bbls. The "chat" formation in the Ritz-Canton-Decker Field yielded the largest initial production, one well having an initial potential production of 14,326 bbls. a day. The average initial production from the Viola lime wells in the same field is 2,000 bbls.

Lifting costs.

The lifting cost in the "chat" formation in the Ritz-Canton-Decker Field is 5 cents per bbl. average, owing to the fact that these wells flow. The lifting costs on oil produced from the Viola lime in the same field average around 10 cents a barrel. Lifting costs of wells in the Voshell Field, producing from the Simpson formation, average around 10 cents per barrel.

Principal leaseholders.

Boyle-Grossman, Braden-McClure, J. Carey, Darby Petroleum Corp., Derby Oil Co., Dieter-Youker, Gypsy Oil Co., Harris & Haun, Hays-Hinkle, Helmerich-Payne, T. C. Johnson, Lario Oil & Gas Co., W. C. McBride, Inc., Mid-Kansas Oil & Gas Co., Mohawk Oil Co., Olson Oil Co., Phillips Petroleum Co., Plains Petroleum Co., Reserve Petroleum Co., Rosenthal-Beardmore, Smith & Ash, Stanolind Oil & Gas Co., Syndicate Oil & Gas Co., Vernon Oil & Gas Co., Washoma Oil Co., Wolf Creek Oil Co., Barnsdall Oil Co., Braman Oil Co., Broswood Oil Co., Dickey Oil Co., General Petroleum Co., McPherson Oil & Gas Co., Marileen Oil Co., T. Palmer, Rose-Spring Oil Co., Rush Oil & Gas Co., E. Shawver, The Texas Company, Sinclair Prairie Oil Co., Wall Gasoline Co., Shell Petroleum Corp., Skelly Oil Co. and W. C. Prunty.

Character of leases.

The leases in the different fields are mostly checkerboard, which resulted in the rapid development of the areas. The Shell Petroleum Corp. has a block of leases in the Johnson Field, consisting of approximately 1,500 acres. The majority of the leases were for 10 years, with the prevailing rental rate.

Locations and wells to acre.

Mostly all wells were drilled on regular locations (one well to 10 acres) in all the pools.

Gas in the fields.

Gas production is found in the Decker Field in large volume. The estimated potential daily gas production of that field is 158,000,000 feet. Gas is also found in most of the wells in all the other fields.

Natural hazards.

The main hazards in the Ritz-Canton-Decker Field are from the "chat" formation. When operators drill wells to the deeper pay horizon they find it difficult to mud off the chat formation.

Legal angles.

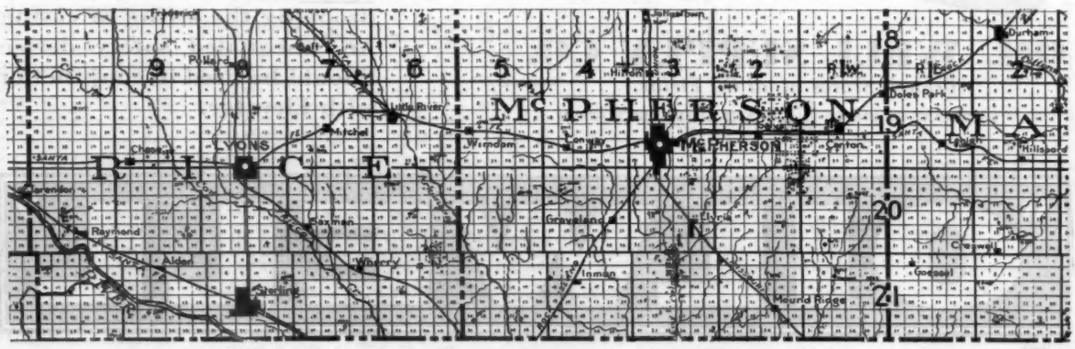
Very little difficulty concerning titles has been encountered in any of the fields to date.

Equipment requirements.

Thus far almost all of the material used in developing the McPherson County fields has been new, and it is believed that the policy of using new material will be continued in the further development of the county's oil and gas resources.

Total recovery.

The total recovery of oil from the Voshell Pool, to August 1, 1932, was approximately 11,269,100 bbls. from 102 wells. The total recovery of oil from the Ritz-Canton-Decker Field was approximately 7,023,364 bbls. from 154 wells, on August 1, 1932. The Ritz-Canton-Decker Field was credited with a daily potential production on August 1, 1932, of 148,965 bbls.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Wildcat in Gaines County Abandoned as Dry; Semiwildcat in Ward Makes 165 Barrels

By L. E. BREDBERG
Fort Worth Bureau, The Oil and Gas Journal

FORT WORTH, Tex., Sept. 5.—Plugging of the interesting wildcat in Gaines County, completion of the semiwildcat of Renaud & Prettyman in Ward County, and the probable reduction in production of the Yates Field, Pecos County, were the most important news items of the week in West Texas. McElreath, Suggett and others' No. 1 Sparks, Section 397, Block G, C.C.S.D.&R.G.N.G. Survey, interesting wildcat which has been watched closely in Gaines County, was abandoned at a total depth of 4,776 feet, after striking a half bailer of sulphur water at 4,755-60 feet, and increasing to a hole full. There was a strong gas showing from 3,115-18 feet, and a small oil showing at 4,695-4,710 feet, which was of little consequence, except for correlation purposes if other tests are drilled in this part of the county.

Renaud & Prettyman's No. 1 University, in Section 4, Block 16, a 1¼-mile southern extension of the Edwards-O'Brien-Hutchings area in northern Ward County, was completed this week for 165 bbls. initial production after plugging back from 2,763 feet to shut off salt water logged at 2,760 feet.

Fisher County Deep Test

Fisher County's interesting deep test in the northeastern part of the county is still shut down after failing to shut off upper water. The pipe was cemented to dry up the hole, and a test will be made as soon as the cement is set. The test created much interest last week when a showing of 31 gravity oil was struck at 6,054-58 feet, believed to be in the Ellenberger lime. The test will be watched closely to note outcome, or possibilities of production. If this test makes a producer from this deeper pay horizon, it will be the first deep producer in this part of West Texas, and will lead to deeper drilling in the area in the future.

A. S. Everett and others have a unitized block of 30,000 acres in Haskell County, extending over into Stonewall County, and will drill a 6,000-foot test in the northwest corner of Block 31, Wise County school lands. This location is 17 miles northeast of the above mentioned Cranfill & Reynolds' test. The deep showing in the Fisher County test has created more interest in the Everett block, which has 16 units, and which may later be taken over by other parties for operation. The location is on the J. L. Jones estate, 4 miles north and 1 mile west of the town of Rule.

The Pure Oil Co. farmed out the west quarter of Section 16, Block 34, H.&T.C. Survey, to Paul Bundy and others of San Angelo, who may drill two wells on the 160-acre tract. The first well will be drilled in the eastern corner of the west quarter of the section. The regular scale of overriding royalty was retained by the assignor.

The Superior Oil Co. of California has purchased the east half of Section 53, Block BB, Crockett County, from the Cushing Refining Co. Two small producing wells were included in the transaction.

The Continental Oil Co. quitclaimed their 30,000-acre block in northwestern Cochran County, which would have expired in November of this year. No effort was made to renew the block on which two dry holes have been drilled.

Ralph Oberholtzer and M. Stein, both of San Angelo, have taken a block of approximately 7,500 acres from R. T. and W. L. Foster, being Sections 26, 27, 28, 29, 31, 32, 33 and 34 in Block 13, H.&T.C. Survey, and Sections 1 and 18 in Block T, and the west half of Section 6 and all of 7. Ten-year paid-up leases were obtained.

Wichita Falls District

The Texas Company's No. 1 E. L. Burns, in Section 1,986, T.E.&L. Survey, east central Young County, 3 miles northeast of the nearest deep producer, has run 5⅜-inch casing for further testing. It has been making several flows during the week, the first flow gauging 24 bbls. The first showing of oil was logged at 4,098 feet, encountering an increase at 4,103-11 feet.

The same company's No. 1 Killion, 4 miles southwest of Graham in the same county, was abandoned as a dry hole at 4,012 feet after encountering a sand at around 3,700 feet with good showing of oil, and appearing as a possible producer.

A. E. Stoute and others' No. 1 L. F. Wilson, in northern Archer County, was abandoned at a total depth of 2,500 feet after failing to pick up any showings in the Canyon series. It logged the Gunsight lime at 1,517-18 feet, and a showing of oil from 1,569-97 feet. Elevation is 1,027 feet.

Five miles northeast of Wichita Falls, Murback, Holmburg and others have staked location on the R. O. Harvey farm in Block 16, J. English Survey, and will drill a 2,250-foot Canyon series test.

R. A. Brand and others' No. 1 B. Z. Lyles in northwest Archer County, is another Canyon series test which failed to produce. It was abandoned at 2,185 feet.

Many Canyon series tests have been drilled in this area during the past five months, all of them being dry except in the Chalk Hill Pool, consequently drilling for this deeper lime production will have a tendency to slow up on account of the misses registered.

Wildcat Operations in West Texas

Week Ending September 5

BORDEN COUNTY

Company, well, farm name, section and block—	Remarks—
Westyde Investment Co.'s No. 1 Looney, 990 ft. from S and E, Sec. 15, Blk. 31, Twp. 4n, T.&P. Sur.	T.D. 845 ft.; underreaming 10-in. csg.

BREWSTER COUNTY

Brewster Oil Co.'s No. 1 fee, 2,640 ft. S and 2,598 ft. E of NW cor., Sec. 45, Blk. G-15, G.C.&S.F. Sur.	S.D. 1,935 ft.
E. L. Chapman's No. 1 Skinner, C SW SE Sec. 100, Blk. 2, G.C.&S.F. Sur.	S.D. 1,302 ft.
Joiner's No. 1 McIntire, 853 ft. from S and 2,390 ft. from E, Sec. 31, Blk. 252, W. J. Mitchell Sur.	S.D. 225 ft.
Trans-Pecos Oil & Gas Co.'s No. 1 Jones, 930 ft. from N and 2,500 ft. from E of Sec. 18, Blk. G-15, G.C.& S.F. Sur.	S.D. 2,900 ft.
Van McPhail's No. 1 McIntyre, SE cor. Sec. 59, Blk. 252, 7 miles south Alpine	S.D. 1,750 ft.

CONCHO COUNTY

Beesley et al's No. 1 Waring Estate, 400 ft. from N and E. Sec. 163, T.&N.O. Sur.	S.D. 2,135 ft.
Simmons et al's No. 1 Schultz, 150 ft. from W and center N and S of E half of J. Weber Sur., Abst. 154.	S.D. 960 ft.

CROCKETT COUNTY

Doleman & Moore's No. 1 Ferner, 2,135 ft. from N and 1,485 ft. from E of Sec. 36, Blk. 2, I.&G.N. Sur.	Spudded and 8 D.
Stanolind Oil & Gas Co. et al's No. 1 Todd, 1,370 ft. from N and 1,320 ft. from E, Sec. 67, Blk. UV, G.C.&S.F. Sur.	Drlg. 4,153 ft.
The Texas Company's No. 1 B. B. Ingham, 330 ft. from S and 2,330 ft. from E line, Sec. 36½, I.&G.N. Sur.	Drlg. 1,735 ft.; show gas 1,480 ft.
J. D. Young Co.'s No. 1 Shannon, 330 ft. from N and W, Sec. 35, Blk. 1, G.C.&S.F. Sur.	Spudding.

COKE COUNTY

Mid-Kansas Oil & Gas Co.'s No. 1 Hearn, 990 ft. from S and W. Sec. 271, Blk. 1-A, H.&T.C. Sur.	Drlg. 3,475 ft.

CULBERSON COUNTY

Milton-Dorsey's No. 1 Biggs, 4,181 ft. from N and 150 ft. from E, Sec. 2, Blk. 112, P.S.L. Sur.	Location.

DAWSON COUNTY

Albaugh et al's No. 1 Robinson, C NW Sec. 46, Blk. M, E.L.&R.R. Sur.	Shut down.

ECTOR COUNTY

Broderick & Calvert's No. 1 Parker, 330 ft. from N and W. Sec. 15, Blk. 44, Twp. 2s, T.&P. Sur.	Drlg. 2,900 ft.
Duffey et al's No. 1 Rutledge, 990 ft. from S, 330 ft. from E, Sec. 7, Blk. B-15	Location.
L. C. Harrison et al's No. 1 Addis, 330 ft. from N and 1,320 ft. from W, Sec. 35, Blk. 43, Twp. 2s, T.&P. Sur.	S.D. 2,720 ft.
Phillips Pet. Co.'s No. 1 Scharbauer, 990 ft. from S and 330 ft. from W Sec. 43, Blk. 44, Twp. 2s, T.&P. Sur.	10-in. csg. cmtd. 1,164 ft.
Thomas et al's No. 1 Edwards, 330 ft. from S, 2,310 ft. from E. Sec. 38, Blk. 43, Twp. 3s, T.&P. Sur.	S.D. 3,200 ft.
T. F. Wurts' No. 1 E. A. Ibbetson et al, 330 ft. from N and E lines of NW Sec. 16, Blk. 46, Twp. 3s, G. M. M.Br.&A. Sur.	S.D. 3,605 ft.

EL PASO COUNTY

Tri-State Oil Co.'s No. 1 Bobadella, 1,325 ft. from S and E lines Sur. 254, S.P. No. 7,247	S.D. 3,070 ft.
Cranfill & Reynolds' No. 1 George, 400 ft. from N and 380 ft. from E, Sec. 200, Blk. 1, B.B.B.&C. Sur.	S.D. 6,058 ft.; to run casing; show oil 6,054-58 ft.
Southern Oil Co.'s No. 1 Purdue, 990 ft. from S and E Sec. 202, Blk. B, B.B.&C. Sur.	Drlg. 2,039 ft.

GLASSCOCK COUNTY

California Co.'s No. 1 O'Byrne, 2,310 ft. from S, 1,650 ft. from E, Sec. 23, Blk. 33, Twp. 2-s, T.&P. Sur.	Underreaming csg. 2,180 ft.
Continental Oil Co.'s No. 2 Hart-Phillips, 660 ft. from N, 1,980 ft. from W, Sec. 24, Blk. 33, Twp. 2-s, T.&P. Sur.	Drlg. 2,344 ft.
B. C. Mann's No. 1 Moore, C NE, Sec. 11, Blk. 35, Twp 3s, T.&P. Sur.	Drlg. 2,620 ft.
Phillips Pet. Co.'s No. 1 Baker, 150 ft. from N and 1,520 ft. from E, Sec. 21, Blk. 33, Twp. 2s, T.&P. Sur.	Building rig.
Tribal Oil Co.'s No. 2 Edwards, 2,292 ft. from W and 330 ft. from S, Sec. 16, Blk. 33, Twp. 2s, T.&P. Sur.	Building rig.

(Continued on Page 44)

Canyon producers on the north side of the Chalk Hill Pool are showing less oil than the wells in the main part of the field to the south, and also have less gas pressure, and will probably have to be pumped in order to make their allowables. Some of them are also making some water.

Deep Oil Development Co.'s No. 1 Wilson, Lease 5-B, ran rods and tubing to pump. It is making about 6 bbls. of water daily. Total depth is 2,244 feet. Top of broken pay is 2,233 feet. The same company's No. 1 Wilson, Lease 5, is also pumping.

L. T. Burns' No. 14, in the Chalk Hill Pool, Archer County, has been abandoned after failing to make a Canyon well. It logged a sand at 2,236-38 feet, which tested only salt water. Total depth is 2,242 feet. Elevation is 472 feet.

Panhandle District

On September 1, independent operators, land and royalty owners, organized into an association known as the Independent Gas and Royalty Owners' Association, met at the Herring Hotel in Amarillo, and drew up a resolution to present to the Railroad Commission of the State. The resolution read as follows: "In view of the serious situation with which said independent operators, land and royalty owners are confronted, it would be conducive to the public welfare of the State of Texas, as a matter of public policy, that some order be entered by the Railroad Commission of Texas, of such import as to permit the independent producers, land and royalty owners, to utilize their gas for purposes other than for light and fuel, and for any legitimate purpose for which they may obtain a market, and not less than a minimum of 25 per cent of the open flow of such producers' lease." The resolution was signed by W. E. Herring, president, J. R. Barnhill, secretary, and a committee composed of R. G. Byrd, Terry Thompson and J. M. Baldridge.

This group contend that the large pipe line companies are at this time draining their gas without compensation, having refused all independents a market, that large investments have been made by the independents which stand at a total loss, and the petitioners are now paying taxes on potential mineral value of their lands without receiving any revenue therefrom.

The landowners showed by repeated demonstration that they disapprove of any form of unitization plan that might be suggested by the major pipe line interests, or anyone else.

The hearing was called primarily in regard to granting of a permit to the Henderson interests to operate their gasoline extraction plant in the west Hutchinson County Field, using dry gas to some extent.

The meeting, however, brought forth submissions of plans to regulate gas production on an oil proration basis, on a unitization method which would divide the field into four separate sweet gas and two separate sour gas units, and on a modification of the unitization plans.

All three members of the Railroad Commission attended the meeting.

COMPLETIONS IN WEST TEXAS

Gaines County

McElreath and Suggett and others' No. 1 Sparks, dry and abandoned, total depth 4,846 feet.

Scurry County

W. S. Guthrie's No. 1 Snyder National Bank, top pay 1,777 feet, initial production 10 bbls., total depth 2,500 feet.

Increase in Allowable in the East Texas District Now Feared as Potential Source of Trouble

By L. E. BREDBERG

DALLAS, Tex., Sept. 5.—New proration orders, issued by the Railroad Commission, increasing the daily per well allowable from 43 bbls. to 50 bbls. for the period September 1 to 16, and setting a top allowable for the field at 375,000 bbls. instead of the past amount of 325,000 bbls., are destined to bring further troubles to the East Texas district. Several major pipe line companies and purchasers say they will continue to buy and run only 43 bbls. per day from the wells to which they are connected.

Only two major purchasers have agreed to take the full 50 bbls. per well, while two others have not made any statements as to the quantity they will run. All others have signified intentions of holding to the past allowable of 43 bbls. The remaining 7 bbls. will be produced by a great percentage of the operators and smaller companies, this amount going to storage on their leases, or being sold to local refineries, or shipped out by tank cars, and no doubt below the market price as considerable oil is now sold. With this difference increasing in the field as more wells are completed, it will grow as a menace to the present price structure, and a cut may be expected, especially in view of the fact that the season of smaller gasoline consumption is on hand, and there is a great amount of empty storage in the district.

The Empire Gas & Fuel Co. was the first of the major companies to announce that it would run only 43 bbls. per day from wells to which it was connected.

H. F. Sinclair's Statement

The Sinclair Prairie Oil Marketing Co. announced that it would follow the commission's orders and take the full 50 bbls. per well allowable Harry F. Sinclair issuing the following statement:

"Increase in East Texas well allowable to 50 bbls. a day only restores a small part of successive cuts which have reduced the allowable production in this area from 225 bbls. a year ago to 43 bbls. per well. Other Texas fields that have been reduced are to be cut back so that the net increase in Texas production will be small.

"There is no excuse whatever for using this small increase in East Texas as a reason for reducing crude prices. I anticipate that there will be some talk of this kind and want to say that we believe crude prices are low enough and that no reduction is justified with better control of East Texas. Prevention of illegal takings in excess of allowables—reasonable restraint all around and 7 bbls. per well increase in East Texas affords no excuse for weakening the price structure. What does it amount to after all—an increase of 25,000 bbls. per day in a State that is producing 875,000 bbls. daily."

President Beaty's View

Amos L. Beaty, president of the American Petroleum Institute, issued a statement in Fort Worth, as he passed through on his way to New York, which read as follows:

"The movement to increase the well allowable in East Texas is dangerous. In my opinion it threatens the present partially stable status of the oil industry of the nation. The fact that it is proposed to reduce allowables in other pools in the State does not alter the case. Those reductions would be quite in order, with no increase, or even further reduction, for East Texas. The State as a whole should be curtailed, but if East Texas is increased the State as a whole will not be curtailed; it will be increased.

"We are now at the beginning of the seasonal decline in consumption. This decline becomes pronounced immediately after Labor Day. Here are the percentage declines in gasoline demand, domestic consumption plus exports, for the month of September as against the month of August, for each of the last five years:

Year	Per cent
1927	5.4
1928	3.4
1929	10.7
1930	6.0
1931	14.1

"Add to this seasonal decline the depression decline of 1932, say 15 per cent, and see what we are facing. Yet, in spite of this, a plan is proposed which would result in additional production and a burden to a market already strained to the breaking point.

"I know that under the Texas law the Railroad Commission can consider only physical waste, but East Texas has been held at 325,000 bbls. a day for many months on the theory and proof that production in excess of that quantity would constitute physical waste. It is beyond my comprehension why anyone should now, of all times, seek to have the commission make an order of the kind proposed.

"I am not participating in any arguments or controversies as between the different pools in Texas or between the different states. What I am thinking of is the industry as a whole. If it can be made to prosper or allowed to prosper, each section will enjoy its part. Otherwise there will be losses for all.

"Yes, I am thinking about price and price stability. I would not make an argument to the Railroad Commission based upon these factors because the commission has nothing to do with price or economics—it deals only with physical waste. But the argument is one which should appeal to those members of the industry who are out on a rash crusade.

"There is no market for additional East Texas crude, except at a reduced price. A number of wells are without connections now."

After reading the above statement, Carl Estes, East Texas, wired Attorney General Allred to take immediate steps to ascertain the source of Judge Beaty's information relative to a threatened price cut in crude oil if the per well allowable in East Texas was raised to 50 bbls. Mr. Allred answered Mr. Estes that he would interview Judge Beaty if possible.

Reductions Elsewhere

At the same time that the daily allowable in East Texas was raised the commission announced a 10 per cent reduction in the allowables for the Van, Yates and Gulf Coast Fields. Many are of the opinion that the Yates Field had been the most carefully and ideally prorated field in the State, producing at a minimum, therefore should not have been further curtailed, but that the Gulf Coast had never been prorated, and was due a cut in production. The reduction in the latter district will run around 11,000 bbls., with 6,500 bbls. in the Yates Pool from the present 65,000-bbl. allowable, and 5,000 bbls. for Van, bringing it down to 45,000 bbls. per day. Cuts in these fields total around 22,500 bbls.

If the commission's orders are put into effect in regard to the Van and Yates Fields, it is believed a Federal injunction will be sought by the major producers in those two areas, the producers in these areas feeling they have been ultraconservative in producing the fields, and have heretofore abided by all orders issued by the commission in regard to them.

Effects of Increase

Two things may probably happen in the East Texas district within a short time as a result of the change in the allowable, the continued producing and running of excess oil, and the theft of still greater quantities of oil from the field. The price is wavering and may fall. If proration is broken the encroachment of salt water and the dissipation of pressures will act to cut down production in the field. There has been so much trouble over proration and prices in East Texas that there are some so disgruntled that they favor letting come what may, taking the consequences, and getting the vast field out of the way. The Yates Field and Winkler Field were held up long as a threat to the industry, and many are of the opinion that East Texas is now taking the place of those two fields in holding back recovery of the industry.

On August 31 the Burton Drilling Co. of Dallas obtained a court order requiring the Texas Pipe Line Co. to transport crude oil which the company had in storage in the East Texas Field. The pipe line company had refused to run the oil because it desired to stay within the ruling of the Railroad Commission forbidding pipe lines to accept oil for transportation without proof it had been produced according to proration orders. The pipe line company took the case to the District Court of Civil Appeals, which granted a stay from the mandamus handed down in the District Court to the drilling company. The case is to be argued in Dallas on September 17. Similar cases may be brought up by operators who have oil in storage, and desire to have it transported by various pipe line companies in the field, which will not run the oil from them.

Completions and Locations

There were 110 more wells added to the production list this week, boosting the total to over 7,800 wells, which have produced a total over 183,000,000 bbls. to date. There were 114 locations staked. Locations and completions are both gradually falling in numbers each week, but over 100 new wells coming in each week are making the pipe line and unconnected well situation more acute, especially as more companies join those who have already stated that they had reached the saturation point, and could not take on any more connections. The increase in per well allowable will no doubt aggravate the situation.

It is understood that the railroads transporting crude out of East Texas may refuse to file monthly reports as ordered by the Railroad Commission, and may take the matter to court if the commission tries to enforce the order in regard to tank car shipments. Tank car shipments continue to gain in the district, and are expected to increase to a great extent since the issuing of the new 50-bbl. order, especially if the pipe line companies elect to take only 43 bbls., letting the operators do what they please with the remaining 7 bbls. This remainder, at least part of it in the field, will be shipped out by tank cars.

Wildcatting Activities

Bowie and Franklin Counties continue to hold interest in regard to wildcats now drilling. Harper and others' No. 1 Harper in the W. N. Dawson Survey, near the Hopkins County line in Franklin County, will be tested this week, proving whether it is to make a well from Woodbine sand cored around 3,300 feet some time ago. It is now standing shut down at 3,407 feet. Elevation of the test is 359 feet. While fishing for a slip, the owners have been purchasing additional acreage in the vicinity, leading others to take an interest, and thereby creating a lease and royalty play. A large structure has been worked out for the area, but faulting may prove a nemesis.

Burnham, Robinson and Greer's No. 1 Weiss is being closely watched in Bowie County since it was reported to have cored an oil sand from 3,717-23 feet. Casing was set without making a drill stem test, and since reports were broadcast that the oil sand was cored, major companies and independents alike have been purchasing acreage in the area.

W. J. Beatly, formerly with the Humble Oil & Refining Co., and Mr. Harris of Fort Worth, have assembled 2,000 acres adjoining the town of Neches on the north, in Anderson County, and will start a test in 90 days. The acreage lays in the E. C. Woodham, J. H. Skaggs, William B. Harrison, W. Pritchard, W. Swearenger and northern part of the J. C. Ogden Surveys.

New Test in Henderson

Henderson County is to get another test. C. W. Murchison and D. S. Golding and others of Dallas will drill a Woodbine sand test on the S. G. Benton farm in the E. G. Reynolds Survey, between the old test drilled by the Texas State Oil Co. and the Westhyde Investment Co.'s No. 1 Thornhill west of Athens.

Marr Drilling Co.'s No. 1 Rettig, located on an 85-acre tract in southern Rusk County, on the south end of the East Texas Field, and about one-quarter mile south of the nearest producer, has been given up as a dry hole at a total depth of 3,713 feet, hemming in the field on this end.

River Bed Test

The Sabine River bed is to have the first of a group of wells to be drilled by five independent organizations which hold leases on the part of the river bed which runs through the producing area of Gregg County. This first well is owned by L. L. Travis, Raditz and others, and is located on Tract No. 8 near Sinclair Prairie Oil Co.'s King and Andrews lease in the J. Keiser Survey. Locations have been staked for 34 other wells on the eight tracts of the river bed, and other locations will be staked in the future, the five different groups having about 100 wells to drill if they drill the entire eight tracts.

COMPLETIONS IN EAST TEXAS

Cherokee County

Mid-Kansas Oil & Gas Co.'s No. 4 H. D. Kelley, top sand 3,692 feet, initial production 80 bbls. per hour through 2½-inch open tubing, total depth 3,694 feet.

North Gregg County

Amerada Petroleum Co.'s No. 8 Hearne, top sand 3,506 feet, initial production 15 bbls in 15 minutes through three-fourths inch tubing choke, total depth 3,518 feet.

Arkansas Fuel Oil Co.'s No. 9 Burnside, top sand 3,489 feet, initial production 27 bbls. in 15 minutes through three-fourths inch tubing choke, total depth 3,514 feet; No. 4-B McKinley, top sand 3,555 feet, initial production 38 bbls. in 15 minutes through three-fourths inch tubing choke, total depth 3,577 feet; No. 3-B McPherson, top sand 3,507 feet, initial production 33 bbls. in 15 minutes through 2-inch tubing choke, total depth 3,532 feet; No. 2 E. Whatley, top sand 3,535 feet, initial production 24 bbls. in 15 minutes through 2-inch open tubing, total depth 3,554 feet. Atlantic Oil Production Co.'s No. 16-A Burnside, top sand 3,521 feet, initial production 33 bbls. per hour through tapered tubing, total depth 3,543 feet; No. 12-B Burnside, top sand 3,482 feet, initial production 33 bbls. per hour through tapered tubing, total depth 3,522 feet; No. 17-B Burnside, top sand 3,478 feet, initial production 33 bbls. per hour through tapered tubing, total depth 3,519 feet; No. 18-B Burnside, top sand 3,471 feet, initial production 33 bbls. per hour through tapered tubing, total depth 3,518 feet; No. 24 J. C. Judge, top sand 3,495 feet, initial production 33 bbls. per hour through tapered tubing, total depth 3,523 feet; No. 25 J. C. Judge, top sand 3,497 feet, initial production 33 bbls. per hour through tapered tubing, total depth 3,527 feet; No. 24 J. M. Moore, top sand 3,502 feet, initial production 33 bbls. per hour through tapered tubing, total depth 3,525 feet; No. 11 Turner, top sand 3,585 feet, initial production 33 bbls. per hour through tapered tubing, total depth 3,633 feet.

Deep Rock and Murphy's No. 8 H. Pritchard, top sand 3,555 feet, initial production 45 bbls. in 15 minutes through 2½-inch open tubing, total depth 3,602 feet. East Texas Refining Co.'s No. 1 Hindman, top sand 3,616 feet, initial production 45 bbls. in 30 minutes through three-fourths inch tubing choke, total depth 3,684 feet. Lacey Petroleum Co.'s No. 2 B. Christian, top sand 3,635 feet, initial production 75 bbls. in 30 minutes through 1-inch tubing choke, total depth 3,670 feet. Magnolia Petroleum Co.'s No. 3 Parnell, top sand 3,564 feet, initial production 160 bbls. per hour through open 2-inch tubing, total depth 3,580 feet. Marvin Wood Oil Co.'s No. 1 Nanny E. Walker, top sand 3,582 feet, initial production 65 bbls. per hour through tubing choke, total depth 3,611 feet.

Shell Petroleum Corp.'s No. 5 Burnside, top sand 3,503 feet, initial production 40 bbls. in 30 minutes through 2-inch open tubing, total depth 3,548 feet; No. 6 W. T. Burnside, top sand 3,518 feet, initial production 15 bbls. in 30 minutes through tapered tubing, total depth 3,548 feet; No. 18 J. Moore, top sand 3,522 feet, initial production 15 bbls. in 30 minutes through tapered tubing, total depth 3,568 feet; No. 10 G. W. Richey, top sand 3,563 feet, initial production 15 bbls. in 30 minutes through tapered tubing, total depth 3,620 feet. Showers and Moncrief's No. 2 Sheppard, top sand 3,544 feet, initial production 75 bbls. per hour through three-fourths inch tubing choke, total depth 3,569 feet.

Simms Oil Co.'s No. 3 A. Christian, top sand 3,565 feet, initial production 150 bbls. per hour through 2½-inch open tubing, total depth 3,578 feet. Sinclair Prairie Oil Co.'s No. 9 M. Lawson, top sand 3,505 feet, initial production 35 bbls. in 10 minutes through 2½-inch open tubing, total depth 3,535 feet. Stanolind and Simms Oil Co.'s No. 7 Fonville, top sand 3,521 feet, initial production 40 bbls. per hour through 1-inch tubing choke, total depth 3,563 feet; No. 13 Persons, top sand 3,502 feet, initial production 55 bbls. in one-quarter hour through 2½-inch open tubing, total depth 3,566 feet.

The Texas Company's No. 6 T. W. Lee, top sand 3,532 feet, initial production 103 bbls. per hour through open 2-inch tubing, total depth 3,563 feet. Tidal Oil Co.'s No. 16 Lake Devernia, top sand 3,507 feet, initial production 21 bbls. in 10 minutes through 2-inch open tubing, total depth 3,542 feet. Yount Lee Oil Co.'s No. 5 V. Calvin, top sand 3,565 feet, initial production 73 bbls. per hour through eleven-sixteenths inch tubing choke, total depth 3,585 feet; No. 7 Hopkins, top sand 3,484 feet, initial production 78 bbls. per hour through eleven-sixteenths inch tubing choke, total depth 3,504 feet.

South Gregg County

Arkansas Fuel Oil Co.'s No. 10 H. Ross, top sand 3,545 feet, initial production 41 bbls. in one-quarter hour through 2-inch tubing choke, total depth 3,552 feet. Atlantic Oil Production Co.'s No. 2 Griffin Davis, top sand 3,574 feet, initial production 33 bbls. per hour through tapered tubing, total depth 3,583 feet. T. A. Bates' No. 3 M. T. Cole, top sand 3,558 feet, initial production 93 bbls. in 50 minutes through 1-inch tubing choke, total depth 3,572 feet. Calaco Oil Co.'s No. 1 Wash and S. Vaults, dry and abandoned, total depth 3,706 feet, top sand 3,705 feet (G. F. Penn Survey). J. E. Davant's No. 1 Rowland, top sand 3,525 feet, initial production 15 bbls. per hour through open 2-inch tubing, total depth 3,580 feet. Baggett & Byers' No. 1 V. Pine Lodge, top sand 3,729 feet, initial production 65 bbls. per hour through three-quarter inch tubing choke, total depth 3,734 feet. Galvez Oil Corp.'s No. 6 M. T. Cole, top sand 3,545 feet, initial production 35 bbls. in one-quarter hour through 2-inch open tubing, total depth 3,557 feet.

Gulf Production Co.'s No. 39 Hilburn estate, top sand 3,519 feet, initial production 82 bbls. per hour through three-quarter inch tubing choke, total depth 3,537 feet; No. 40 Hilburn estate, top sand 3,529 feet, initial production 90 bbls. per hour through three-quarter inch tubing choke, total depth 3,546 feet. Houston Oil Co.'s No. 3 M. T. Cole, top sand 3,544 feet, initial production 150 bbls. per hour through open 2-inch tubing, total depth 3,554 feet; No. 3 Elder, top sand 3,554 feet, initial production 75 bbls. per hour through open 2-inch tubing, total depth 3,614 feet; No. 3 M. B. Hughey, top sand 3,503 feet, initial production 150 bbls. per hour through open 2-inch tubing, total depth 3,548 feet. Hughes & Foley's No. 3 Adkins heirs, top sand 3,640 feet, initial production 55 bbls. in one-half hour through open 2-inch tubing, total depth 3,644 feet. T. A. Johnson, trustee's No. 2-C Cole, top sand 3,508 feet, initial production 40 bbls. in one-quarter hour through open 2-inch tubing, total depth 3,538 feet. Jones & Doss' No. 5 Lula Martin, top sand 3,745 feet, initial production 85 bbls. per hour through 1-inch tubing choke, total depth 3,750 feet. Rodger Lacy's No. 1 Fee, top sand 3,540 feet, initial production 65 bbls. per hour through three-quarter inch tubing choke, total depth 3,590 feet. Lambert & Hines' No. 2 E. Hilburn, top sand 3,689 feet, initial production 75 bbls. per hour through 1-inch tubing choke, total depth 3,702 feet. W. R. Matthews' No. 2 L. Martin, top sand 3,752 feet, initial production 30 bbls. in one-quarter hour through 1-inch tubing choke, total depth 3,759 feet.

Mead Brothers' No. 1 I.&G.N.R.R., top sand 3,552 feet, initial production 30 bbls. in 25 minutes through open 2-inch tubing, total depth 3,612 feet. Pelican Natural Gas Co.'s No. 5 Spear and Laird, top sand 3,657 feet, initial production 80 bbls. per hour through open 2-inch tubing, total depth 3,667 feet. E. J. Radatz' No. 2 M. T. Cole, top sand 3,523 feet, initial production 40 bbls in one-quarter hour through open 2-inch tubing, total depth 3,540 feet. Salmon Oil Co.'s No. 3 W. Smith, top sand 3,532 feet, initial production 75 bbls. per hour through three-quarter inch tubing choke, total depth 3,566 feet. Shell Petroleum Corp.'s No. 2 Register, top sand 3,585 feet, initial production 15 bbls. in one-half hour through tapered tubing, total depth 3,601 feet. Sinclair Prairie Oil Co.'s No. 11 A. A. Lockhart, top sand 3,670 feet, initial production 40 bbls. in one-quarter hour through open 2½-inch tubing, total depth 3,680 feet. H. R. Smith, Inc.'s No. 3 R. Grey, top sand 3,655 feet, initial production 75 bbls per hour through three-quarter inch tubing choke, total depth 3,667 feet. Stanolind Oil & Gas Co.'s No. 7 J. R. Beall, top sand 3,662 feet, initial production 43 bbls. per hour through open 2-inch tubing, total depth 3,664 feet. The Texas Company's No. 6 M. T. Cole, top sand 3,514 feet, initial production 92 bbls. per hour through open 2-inch tubing, total depth 3,563 feet. W. C. Turnbow's No. 1 Knowles, top sand 3,540 feet, initial production 43 bbls. per day by heads, total depth 3,585 feet.

North Rusk County

G.&A. Oil Co.'s No. 2 W. Robinson, top sand 3,568 feet, initial production 50 bbls. per hour through 1-inch tubing choke, total depth 3,645 feet. Navarro Oil Co.'s No. 8 Brightwell, top sand 3,604 feet, initial production 47 bbls. in one-half hour through three-quarter inch tubing choke, total depth 3,633 feet.

South Rusk County

Arkansas Fuel Oil Co.'s No. 6 J. E. Wheelis, top sand 3,641 feet, initial production 25 bbls. in one-half hour through 2-inch open tubing, total depth 3,670 feet. C. P. Oil Co.'s No. 4 Giles, top sand 3,702 feet, initial production 45 bbls. in one-half hour through 2½-inch open tubing, total depth 3,764 feet. Conservative Oil Co.'s No. 8 L. Harmon, top sand 3,778 feet, initial production 43 bbls. in 28 minutes through 2½-inch open tubing, total depth 3,810 feet. Belrice Oil Co.'s No. 1 C. Young, top sand 3,652 feet, initial production 15 bbls. in one-quarter hour through open 2-inch tubing, total depth 3,691 feet. George Demonstrand's No. 3 L. J. Pinkston, top sand 3,607 feet, initial production 100 bbls. per hour through 2½-inch open tubing, total depth 3,630 feet. Gant and Garvin's No. 3 W. Moore, top sand 3,550 feet, initial pro-

East Central Texas Wildcats

Week Ending September 5

Company, well, farm name, section and block—	Remarks:
ANDERSON COUNTY	
Frazier et al's No. 1 H. L. Hudson, 200 ft. from S line and 200 ft. from W line of 196-ac. tract, M. Rionda Sur.	Drlg. 1,363 ft.
Roeser and Pendleton's No. 1 M. A. Davy, 660 ft. from N line and center of E and W lines of tract and survey, P. G. Adams Sur.	Derrick.
C. R. Willmuth et al's No. 1 N. B. Watson, 500 ft. from W line and 4,850 ft. from N of S line of survey in S½ of 129-ac. tract, M. Main Sur.	T.D. 1,538 ft.
ANGELINA COUNTY	
Hurlburt et al's No. 1 Long Bell Lumber Co., 160 ft. N and 200 ft. W of SE cor. of survey, H.T.&B. Sur.	Set surface csg.
Waitman et al's No. 1 L. J. Dearman, 350 ft. from S and W lines of 20-ac. tract, J. T. Peavy Sur.	Rig up.
BOWIE COUNTY	
Roy Anderson's No. 1 Dykes, 2 miles W of Texarkana, M. Dykes Sur.	Coring 2,153 ft.; cored sandy shale 2,120-33 ft.; slight show of oil.
Burnham-Robertson and Greer's No. 1 F. O. Weiss, 850 ft. from N line and 200 ft. from W line of B. H. Williams 50-ac. tract, Jessie Dean Sur.	S.D. 3,727 ft.
CHEROKEE COUNTY	
Barkley Tate et al's No. 1 H. E. Neal, 330 ft. from N and W lines of tract, J. M. Prosella Sur.	Derrick.
Bridges and Candler's No. 1 Berryman, center of Berryman tract, H. Kimble Sur.	S.D. 1,000 ft.
Davis et al's No. 2 Annie Kelly, 631 ft. W of No. 1, M. De Los Santos Coy Sur.	Derrick.
Marr Drilling Co. and Stanolind Oil & Gas Co.'s No. 1 Green, 1,264 ft. from S line and 1,450 ft. from W line of lease, A. D. Kelker Sur.	Drlg. 1,225 ft.
Mid-Kansas Oil & Gas Co.'s No. 2 J. A. Layne, 330 ft. from N and E lines of lease, M. D. L. S. Coy Sur.	Drlg. 2,815 ft.
Mid-Kansas Oil & Gas Co.'s No. 5 H. D. Kelley, 330 ft. from N line and 1,982 ft. from E line of lease, M. D. L. S. Coy Sur.	Derrick.
Mid-Kansas Oil & Gas Co.'s No. 6 H. D. Kelley, 330 ft. from N line and 1,156 ft. from E line of lease, M. D. L. S. Coy Sur.	Location.
Pure Oil Co.'s No. 1 W. B. Nicholson, 300 ft. from S and E lines of 72-ac. tract, R. Stewart Sur.	Location.
William A. Stone's No. 1 J. T. Perkins, 200 ft. from NW cor. of lease, Thomas Stanford Sur., 3 miles S of Ponta	S.D. 2,960 ft.
Wilson & Stubbs' No. 1 L. Robert, 450 ft. from S and 150 ft. from W line of lease, J. B. Wolfin Sur.	S.D. 3,170 ft.
DELTA COUNTY	
Commerce Oil Co.'s No. 1 Ablowich, 150 ft. from S line and 776 ft. from W line of H. D. Jewett 52-ac. tract, E. Chick Sur.	S.D. 3,813 ft.
Joiner et al's No. 1 Blackwell, 800 ft. S and 150 ft. from E lines of 275-ac. tract, Dunnetelle Sur.	S.D. 3,200 ft.
ELLIS COUNTY	
Armstrong's No. 1 Milton Cook, SE cor. of 50-ac. tract, S. Frederick Sur.	Drlg. 318 ft.
Armstrong Bros.' No. 1 Reeves	Waiting on cmt. to set 100 ft.
Armstrong Bros.' No. 1 John Lee Winn, 1,650 ft. from E and 150 ft. from S of Orland, Orlo Wheeler Sur.	S.D. 1,435 ft.
Clark Brooks' No. 1 Anderson, SE cor. of 3,900-ac. tract, 10 miles SW of Wachatchie, E. C. Branch Sur.	Drlg. 910 ft.
Paris Oil Co.'s No. 1 O. S. Bain, 1,500 ft. from S line and 300 ft. from W line of 60-ac. lease, R. M. Williams Sur.	T.D. 650 ft.
FRANKLIN COUNTY	
Tom Harper's No. 1 fee, 150 ft. from N line and 200 ft. from E line of 116-ac. tr., W. M. Dawson Sur.	Drlg. plug 3,250 ft.
FREESTONE COUNTY	
Clyde Creighton's No. 1 Holley Bros., 854 ft. from W line and center of N and S lines of lease, A.B.M. Sur.	S.D. 1,865 ft.
GREGG COUNTY	
Arkansas Fuel Oil Co.'s No. 1 E. Killingsworth, 330 ft. from N and W lines of lease, William Robinson Sur.	Location.
Bishop Corp.'s No. 1 J. H. Thomas, 330 ft. from W line of lease and S offset to Flannigan and Brazell's No. 1 Thomas, H. F. Rodgers Sur.	Drlg. 2,730 ft.
Carroll and Blaine's No. 1 A. King, 200 ft. E of No. 1 S. King, M. V. Winkle Sur.	Rig up.
Tom Carter's No. 1 George Anderson, 250 ft. SE of East Texas Loan & Investment's No. 3 Anderson, C. H. Alexander Sur.	Drlg. 2,500 ft.
Corbin et al's No. 1 A. H. Tubbs, 330 ft. from S and W lines of 50-ac. lease, D. Sanches Sur.	Drlg. 3,495 ft.
W. R. Dearing & Son's No. 1 Ben Beam, center of 1-ac. tract, M. V. Winkle Sur.	Waiting on cmt. to set 3,538 ft.
Fines Oil Co.'s No. 1 Phil Barton, 1,000 ft. N of Magnolia Rollin, most northerly NE cor., M. V. Winkle Sur.	Running csg.; T.D. 3,552 ft.
F. E. Flannery's No. 1 M. T. Cole, 330 ft. from W line and center of N and S lines of 10-ac. lease, E. M. Bramlett Sur.	Rig up and S.D.
Lewis Godlin's No. 1 E. L. Walker, 330 ft. N of road, 330 ft. from E line of 80.2-ac. tract, M. Dillard Sur.	Derrick.
Guinn Petroleum Co.'s No. 1 J. S. and F. Elder, 200 ft. NE of Solar's No. 1 Elder, and 450 ft. SE of Martin's No. 1 Elder, M. V. Winkle Sur.	Rig up.
W. A. Hudson et al's No. 1 J. W. Akin, 133 ft. from N line and 330 ft. from W line of lease, W. H. Castleberry Sur.	Drlg. 2,100 ft.

(Continued on Next Page)

duction 50 bbls. per hour through open 2-inch tubing, total depth 3,623 feet. Golding and Muchinson's No. 2-B C. Young, top sand 3,679 feet, initial production 101 bbls. per hour through open 2-inch tubing, total depth 3,718 feet. John W. Hoosier's No. 3-A George Eaton, top sand 3,700 feet, initial production 360 bbls. per hour through open casing, total depth 3,740 feet; No. 4-B Eaton, top sand 3,772 feet, initial production 60 bbls. per hour through open 2-inch tubing, total depth 3,810 feet. Humble Oil & Refining Co.'s No. 5 John Bell, top sand 3,784 feet, initial production 34 bbls. in one-half hour through three-quarter inch tubing choke, total depth 3,804 feet; No. 3 L. R. Lindsey, initial production 70 bbls. per hour through three-quarter inch tubing choke, total depth 3,777 feet; No. 21 W. L. Price, top sand 3,706 feet, initial production 77 bbls. per hour through three-quarter inch tubing choke, total depth 3,802 feet; No. 3-B Heywood White, top sand 3,615 feet, initial production 43 bbls. per hour through three-quarter inch tubing choke, total depth 3,720 feet.

Hunt Production Co.'s No. 2 O. R. Holt, top sand 3,763 feet, initial production 60 bbls. in 20 minutes through open 2-inch tubing, total depth 3,775 feet. Indian State Oil Co.'s No. 2 L. Tolliver, top sand 3,670 feet, initial production 60 bbls. per hour through open 2-inch tubing, total depth 3,740 feet.

Mid-Kansas Oil & Gas Co.'s No. 9 H. C. and G. W. Burton, top sand 3,603 feet, initial production 76 bbls. per hour through open 2-inch tubing, total depth 3,622 feet; No. 35 M. M. Cross, top sand 3,611 feet, initial production 130 bbls. per hour through open 2-inch tubing, total depth 3,641 feet; No. 8 M. C. DeGuerin, top sand 3,587 feet, initial production 110 bbls. per hour through 2-inch tubing, total depth 3,653 feet; No. 20 W. T. Grissom, top sand 3,619 feet, initial production 98 bbls. per hour through 2-inch tubing, total depth 3,637 feet; No. 10 D. Ledbetter, top sand 3,628 feet, initial production 44 bbls. per hour through 2-inch tubing, total depth 3,645 feet; No. 12 E. E. Moores, top sand 3,587 feet, initial production 76 bbls. per hour through 2-inch tubing, total depth 3,665 feet; No. 5 George Moore, top sand 3,664 feet, initial production 98 bbls. per hour through 2-inch tubing, total depth 3,670 feet; No. 9 S. H. Moores, top sand 3,637 feet, initial production 72 bbls. per hour through 2-inch tubing, total depth 3,716 feet.

Sunbeam Oil Co.'s No. 1 J. W. Key, top sand 3,760 feet, initial production 30 bbls. per day flowing by heads (J. Lindley Survey), total depth 3,763 feet. Stanolind Oil & Gas Co.'s No. 4 Mason, top sand 3,613 feet, initial production 43 bbls. in 24 minutes through 2½-inch open tubing, total depth 3,623 feet; No. 17 R. A. Moores, top sand 3,699 feet, initial production 43 bbls. in 17 minutes through 2½-inch open tubing, total depth 3,610 feet. Stanolind and Pure Oil Co.'s No. 22 W. H. Siler, top sand 3,612 feet, initial production 43 bbls. in 22 minutes through open 2½-inch tubing, total depth 3,660 feet.

The Texas Company's No. 7 Pinkston, top sand 3,590 feet, initial production 75 bbls. per hour through open 2-inch tubing, total depth 3,655 feet. Tidal Oil Co.'s No. 6 A. P. Finney, top sand 3,705 feet, initial production 12 bbls. in 15 minutes through open 2-inch tubing, total depth 3,723 feet. Venerable-Reese and others' No. 4 J. Flannigan, top sand 3,625 feet, initial production 130 bbls. per hour through 2½-inch open tubing, total depth 3,655 feet. Ward Oil Co.'s No. 7 A. P. Finney, top sand 3,657 feet, initial production 47 bbls. per hour through open 2-inch tubing, total depth 3,700 feet.

Smith County

Cockburn and Hooper's No. 1 Lula Jackson, top sand 3,810 feet, initial production 60 bbls. per hour through open 2-inch tubing, 2 per cent water, total depth 3,811 feet (E. Daniels Survey). Mid-Kansas Oil & Gas Co.'s No. 13 J. H. Sharp, top sand 3,685 feet, initial production 82 bbls. per hour through 2-inch tubing, total depth 3,688 feet. Sun Oil Co.'s No. 11 O. W. Knight, top sand 3,624 feet, initial production 32 bbls. per hour through tapered tubing, total depth 3,648 feet; No. 3-A H. A. Pace, top sand 3,672 feet, initial production 33 bbls. per hour through tapered tubing, total depth 3,684 feet. J. S. Wheelis' No. 2 G. Patterson, top sand 3,670 feet, initial production 10 bbls. in 15 minutes through open 2-inch tubing, total depth 3,679 feet.

Upshur County

Cal-Pet Corp.'s No. 6 W. M. Clements, top sand 3,741 feet, initial production 60 bbls. per hour through open 2-inch tubing, total depth 3,760 feet. Galvez Oil Corp.'s No. 5 Moore heirs, top sand 3,716 feet, initial production 75 bbls. per hour through 1-inch tubing choke, total depth 3,718 feet. Island Oil Co.'s No. 3 Bonner, top sand 3,663 feet, initial production 120 bbls. per hour through open 2-inch tubing, total depth 3,663 feet. Lester and Duffield's No. 2 L. Graves, top sand 3,645 feet, initial production 30 bbls. in one-quarter hour through 1-inch tubing choke, total depth 3,658 feet. Peckham Oil Co.'s No. 1 E. H. Hampton, top sand 3,674 feet, initial production 50 bbls. per hour through open 2-inch tubing, total depth 3,686 feet; No. 4 Wells, top sand 3,706 feet, initial productioin 80 bbls. per hour through 1-inch tubing choke, total depth 3,726 feet.

J. D. Reynolds' No. 2 A. Miller, top sand 3,733 feet, initial production 27 bbls. per hour through three-quarters inch tubing choke, total depth 3,768 feet. Rio Oil Co.'s No. 5 L. Graves, top sand 3,586 feet, initial production 36 bbls. in one-quarter hour through 1-inch tubing, total depth 3,601 feet. Sloan-Cooper Drilling Co.'s No. 4 O'Byrne, top sand 3,689 feet, initial production 30 bbls. per hour through three-quarters inch tubing choke, total depth 3,703 feet. Shell Petroleum Corp.'s No. 12 C. C. Landers, top sand 3,741 feet, initial production 21 bbls. in one-quarter hour through 2½-inch open tubing, total depth 3,771 feet. Simms and Russ' No. 6 J. J. Flewellen, top sand 3,696 feet, initial production 85 bbls. per hour through 2½-inch open tubing, total depth 3,707 feet Simms and Stanolind Oil & Gas Co.'s No. 18-B Flewellen, top sand 3,704 feet, initial production 75 bbls. per hour through 2½-inch open tubing, total depth 3,713 feet.

Large Gasser in Tioga County, Penna.; Test New Structure in New York

By SPECIAL CORRESPONDENT

OLEAN, N. Y., Sept. 3.—The successful exploration for gas in the Oriskany sand in southern New York and northern Pennsylvania has been the means of keeping drilling alive in the most easterly of the country's oil and gas areas for the past year, following the slowing up of drilling in the Allegany and Bradford Fields which have been under curtailment.

The "play" has extended all the way from Canandaigua, N. Y., southeasterly to the Watkins and Corning areas, thence south into the Wellsboro, Pa., country and then westerly into Potter County, and now it is reaching out farther west to the vicinity of Smethport, in McKean County and northerly from Potter County into Allegany County, New York, a 50-year-old oil field.

The latest likely looking structure has been discovered through the researches of Jack Gaddes, geologist, who is credited with having pointed the way to the discovery of gas in Tioga County, Pennsylvania. Gaddes, working for George L. Kerr, has mapped out a structure in Allen Township, Allegany County, New York, midway between Belfast and Angelica. Kerr and his associates, George Donovan, of Minneapolis, Minn.; Joseph A. Kaufman, Great Falls, Mont., and Samuel Hays of Tulsa, blocked up the land and have made a deal with S. J. Brendel and the Kemrow Drilling Corp. of Olean for a 5,000-foot, or deeper, test on the Allen Township structure.

Drilling reports have been published in The Oil and Gas Journal on other tests in Allegany County, none of them being yet deep enough to be significant. These wells include the Belmont Quadrangle Drilling Co.'s No. 1 Ballard-Hassard, near Richburg and Randolph and others' No. 1 Rutter near the old university town of Alfred.

32,000,000-Foot Gasser

The potential gas production of the Tioga County, Pennsylvania, Field was increased this week when the Lycoming Producing Co. completed a 32,000,000-foot gasser in No. 3 on the Farr farm, in Lawrence Township. The top of the Oriskany sand was found at 4,020 feet and the hole was bottomed at 4,028 feet. This well increases the potential production of the Tioga Field to 580,000,000 feet per day. No trouble was experienced in drilling or completing the well and a portion of the output was turned into the Lycoming Gas Co.'s 110-mile line to Syracuse, N. Y. The Lycoming Producing Co. drilled a 12,000,000-foot well and a salt water well on the same farm. The York Penn Gas Co., a Corning, N. Y., company, has started a test 2,000 feet north of No. 3 Farr.

The Belmont Quadrangle Drilling Co., the largest gas producer in the Dundee Field, in Yates County, New York, is surveying for a gas pipe line from the Rathbone Field in Steuben County to connect with the Columbia Gas Co.'s trunk line.

WAX BY HYDROGENATION

NEW YORK, Sept. 3.—Contrary to the belief apparently held in some quarters of the trade, both petrolatum and wax are available through refining by the hydrogenation method, according to Dr. R. T. Haslam, vice president and general manager of the Standard Oil Development Co. The output of wax and petrolatum roughly approximates the percentages of these constituents in the charging stock, Doctor Haslam said. For example, if there is 15 per cent wax content in the charging stock, the oil leaving the hydro unit will show between 13½ and 15½ per cent wax content.

Smaller Gasoline Stocks in East Coast Markets

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week, with inquiries limited to small quantities, and new business relatively light.

The following table shows exports of principal refined products from the port of New York for the past three weeks (all figures in gallons unless otherwise noted):

	Week ended		
	Aug. 27	Aug. 20	Aug. 13
Gasoline	40,000	70,000	10,000
Naphtha	120,000	325,000	60,000
Kerosene	28,000	125,000	15,000
Fuel and gas oil	335,000	.....	.....
Lub oil	455,000	1,479,000	590,000
Pet., refined	280,000	25,000	75,000
	Pounds		
Petrolatum	15,000	5,000	29,000
Paraffin wax	770,000	760,000	1,175,000
Refined	70,000	205,000	35,000
Scale	215,000	300,000	125,000
Lub grease	525,000	525,000	605,000

Intercompany shipments to foreign marketing subsidiaries continue light, with movement of gasoline, kerosene and other light products off as a result of the import tariff, which has diverted considerable of this business to refineries in the Caribbean refining area.

Imports

Imports of crude and refined petroleum at principal United States ports for the wek ended August 27 totaled 631,000 bbls., a daily average of 90,143 bbls., compared with 847,000 bbls., a daily average of 121,000 bbls. for the previous week. Of the week's imports, 34,000 bbls. came into Baltimore, 533,000 bbls. into New York, and 64,000 bbls. into Philadelphia. The imports for the week comprised 6,000 bbls. of gas oil, 561,000 bbls. of fuel oil, and 64,000 bbls. of crude petroleum.

California Oil Receipts

Receipts of California crude and refined petroleum at Atlantic and Gulf Coast ports for the week ended August 27 totaled 113,000 bbls., a daily average of 16,143 bbls., compared with 523,000 bbls., a daily average of 74,714 bbls. for the previous week, and a daily average of 43,071 bbls. for the four weeks ended August 27. All of the week's receipts were of fuel oil, and came into New York.

Intercompany movement of California gasoline to the eastern seaboard has not reached the anticipated totals this season, and it is generally believed that shipments will be held down to small totals to protect the market position in this area.

East Central Texas Wildcats

(Continued from Preceding Page)

Humble Oil & Refining Co.'s No. 1 W. C. Shoultz, 330 ft. from N and W lines of 119-ac. lease, S. S. Davis Sur. ..... Derrick.

Idaho Oil Co.'s No. 1 T. B. Harris, 40 ft. from N and S lines and 330 ft. from W line of lease, W. H. Castleberry Sur. ..... S.D. 2,935 ft.

F. C. Jones et al's No. 1 C. L. Taylor, center of 1 9/16-ac. lease, W. H. Castleberry Sur. ..... Drlg. 3,200 ft.

S. J. Jordan's No. 1 E. L. Walker, 660 ft. W of SE cor. of lease and 155 ft. from S line and 155 ft. from river, E. A. Lambert Sur. ..... T.D. 2,600 ft.

C. H. Lyons' No. 1 F. J. Richards, 227 ft. from N line and 131 ft. from W line of lease, M. V. Winkle Sur. .. Drlg. 2,870 ft.

John Mabee's No. 1 Whitehurst, 330 ft. from S and W lines of lease, McKinley and Williams Sur. ..... Waiting on cmt. to set; T.D. 3,650 ft.

Magnolia Petroleum Co.'s No. 1 Mary Goyne, 330 ft. from N line and 369 ft. from E and W lines of 29.45-ac. lease, J. Blair Sur. ..... Set csg. 3,633 ft.

Magnolia Petroleum Co.'s No. 1 M. Andrews, 330 ft. from N line and 368 ft. from E line of lease, J. Blair Sur. ..... Drlg. 3,490 ft.

Marine Oil Co.'s No. 1 W. N. Bradley, W offset to Marine's No. 1 Richey, William Carlton Sur. ..... Drlg. 3,465 ft.

McBride et al's No. 1 Tubbs, 330 ft. from N line and center of E and W lines of 6-ac. lease, D. Sanches Sur. ..... Derrick.

J. B. Patty et al's No. 1 Farrell, 330 ft. S and 175 ft. W of NE cor. of E 50 acres of 148-ac. tract, D. Sanches Sur. ..... Location.

J. B. Patty et al's No. 1 J. C. McCormick, 207 ft. SE at right angles of Gladewater-Tyler road and 540 ft. SW of Abernathy and Kirkpatrick's No. 1 Gregston, M. Dillard Sur. ..... Top sand 3,596 ft.; rigging up pumping rig; T.D. 3,617 ft.

E. A. Payne et al's No. 1 R. M. Woods, 20 ft. from S line and 31 ft. from W line of 2.13-ac. lease, H. R. Hokit Sur. ..... Derrick.

V. J. Pearson's No. 1 R. Lacy, 90 ft. from S and W lines of Blk. No. 1, M. V. Winkle Sur. ..... Waiting on cmt. to set 3,547 ft.

J. J. Roberts' No. 1 H. S. and F. Elder, 90 ft. from SW line and 90 ft. from E line of 1-ac. lease, M. V. Winkle Sur. ..... Testing 3,585 ft.

Russell Petroleum Co.'s No. 1 M. T. Cole, 330 ft. from S and E lines of survey, J. A. Duncan Sur. ..... Drlg. 2,580 ft.

Solar Exploration's No. 1 M. E. Church, 150 ft. from N line and 50 ft. from E line of NW cor. of Blk. No. 169, M. V. Winkle Sur. ..... Drlg. 3,300 ft.
South Gulf Production Co.'s No. 1 Cemetery, 225 ft. NW of Barnsdall's No. 1 McGrede, on one-half acre lease, D. Sanches Sur. ..... S.D. 200 ft.
Sowell et al's No. 1 M. S. Strong, 330 ft. from S line and center of E and W lines of 13.53-ac. tract, G. F. Penn Sur. ..... Drlg. 1,400 ft.
Stewart and Duffy's No. 1 R. M. Spear, 150 ft. SE of Blk. No. 168 ..... Location.
Sun Oil Co.'s No. 1 T. J. Pressley, 330 ft. from N and W lines of lease, M. Alexander Sur. ..... Drlg. 2,810 ft.
W. C. Turnbow, trustee's No. 1 J. N. Dixon, 330 ft. from E line of lease and 477 ft. N of Alexander and Rassmussan's No. 1 Dixon, I. Beaty Sur. ..... T.D. 3,664 ft.
J. C. Vernon's No. 1 Cemetery, N offset to Welch and Sandler's No. 1 Barnett, T. Johnson Sur. ..... Drlg. 3,060 ft.
Yount Lee Oil Co.'s No. 1 T. W. Lee, 330 ft. from N and W lines of lease, William Robinson Sur. ..... Derrick.
J. Zeppa, trustee's No. 1 Hughey-Ross, 1,750 ft. S and 215 ft. E of NE cor. of John Moffitt Sur., W. P. Chisum Sur. ..... Running csg. 3,557 ft.

HENDERSON COUNTY

B. L. Green et al's No. 1 M. H. Gussett (old well drilled deeper), 150 ft. from N line and 1,000 ft. from W line of 105.5-ac. tract, 3 miles SW of Mabank, L. D. Stover Sur. ..... S.D. 3,147 ft.
Dr. J. T. Kennon et al's No. 1 Rowe & Baker, 1,320 ft. from N line and 150 ft. from W line of survey and tract, Josiah T. Childress Sur. ..... Spudded.
H. H. Meyer's No. 1 M. E. Olson, 2 miles S of Brownsboro tract in NW cor. of survey, George Wilson Sur. ..... S.D. 2,470 ft.
C. W. Murchison et al's No. 1 S. G. Benton, 800 ft. from S line and 330 ft. from E line of lease, 5 miles NE of Athens, B. G. Reynolds Sur. ..... Running csg.; T.D. 200 ft.

HILL COUNTY

Sherman-Houseman's No. 1 J. F. Griffith, in Samuel Waddell Sur. ..... Fishing 3,256 ft.
T. J. Spikes' No. 1 M. H. Davis, 150 ft. from S and E lines of 55-ac. tract, H. R. Alexander Sur. ..... S.D. 1,319 ft.

HOPKINS COUNTY

Columbia Oil & Gas Co.'s No. 1 McCloud, 150 ft. from S line and 200 ft. from E line of lease, Holbrook Sur. ..... Derrick.
Roark et al's No. 1 Taylor, 220 ft. from N and W lines of 80-ac. tract, in the John Polk Sur. ..... S.D. 540 ft.

HUNT COUNTY

Chandler et al's No. 1 Mrs. A. Walker, 200 ft. from S line and 500 ft. from W line of most southerly SW cor. of tract and survey, J. P. Bowerman Sur. ..... S.D. 3,171 ft.

KAUFMAN COUNTY

Standy Darnell et al's No. 1 Sally Pannill ..... S.D. 2,485 ft.

LAMAR COUNTY

G. W. Davy et al's No. 1 McGustion, 450 ft. from S line, 450 ft. from W line of farm and survey, Galet Wood Sur. ..... Temp. abnd. 3,605 ft.
Doyle and Jondeau's No. 1 Martin, 990 ft. from N line and 330 ft. from E line of tract, Joseph Deck Sur. ..... Rig up (correction).

LEON COUNTY

Alladay et al's No. 1 W. R. Thompson, 330 ft. from N line of survey and 330 ft. from E line of 98-ac. tract, N. M. Allen Sur. ..... Spudded.

MORRIS COUNTY

Joiner & Harris Drilling Co.'s No. 1 Clayton Brown, 1,625 ft. N of most easterly SW cor. of survey, William M. Coffey Sur. ..... Derrick.
Leonard's (Tucker-Fullwood) No. 1 P. M. Staggers, 450 ft. from N line and 150 ft. from E line of 65.5-ac. tract, J. D. Nelson Sur. ..... S.D. 3,554 ft.

POLK COUNTY

Cannon et al's No. 1 Roberts, 10 miles N of Livinston, Romera Sur. ..... Rip up and S.D.

RED RIVER COUNTY

Concord Oil Co.'s No. 1 J. R. Dallahunty, 500 ft. from N of Isaac Moore Sur. and 200 ft. E of E line of Robert Glass Sur. ..... Reaming 2,545 ft.

ROCKWALL COUNTY

Bucanner Oil Co.'s No. 1 H. L. Lofland, center of 69-ac. tract in W. M. Bird Sur. ..... Set 10-in. csg. 130 ft.

RUSK COUNTY

Acme Oil Co.'s No. 2 Andy Givens, 150 ft. from W line and center of N and S lines of 2-ac. lease, R. E. Winn Sur. ..... Testing 3,659 ft.
Boggs et al's No. 1 J. Border, 280 ft. S of Wyche's No. 1 Arnold on 5-ac. lease, P. W. Holmes Sur. ..... Rig up.
Brooks Petroleum Co.'s No. 1 Mayfield, Daniel Clark Sur. ..... Top sand 3,622 ft.; waiting on standard rig; would not flow; T.D. 3,702 ft.
T. E. Castle's No. 1 R. H. Gary estate, 3,960 ft. from N line and 5,280 ft. from W line of survey, 10 miles S of Henderson, A. Latham Sur. ..... T.D. 3,370 ft.
Daisy Oil Co.'s No. 1 C. Young, 330 ft. N and 330 ft. E of SE cor. of Sun's Selman lease, M. J. Pru Sur. ..... Prepare to spud.
Falcon Oil Co.'s No. 1 P. S. Tipps, 1256 ft. from N line and 110 ft. from E and W lines of 1.69-ac. tract, W. J. Roane Sur. ..... Set csg.; T.D. 3,679 ft.
Granver Oil Co.'s No. 1 Beasley, S offset to Everts Drilling Co.'s No. 1 Beasley, T. C. Lloyd Sur. ..... Waiting on cmt. to set 3,792 ft.
J. Guinn's No. 1 Neal Cooper, center of Blk. No. 36, T. J. Moore Sur. ..... Waiting on standard rig; T.D. 3,660 ft.
Gulf Production Co.'s No. 1 Bator, S offset to Humble's No. 3 Peterson, Mary Cogswell Sur. ..... Drlg. 2,330 ft.
Harris and Russell's No. 1 T. W. Harris, 330 ft. from S line and 660 ft. from W line of most southerly SW cor. of 160-ac. tract, 3 miles SW of Henderson, W. G. Davis Sur. ..... Derrick.
Hart Petroleum Co.'s No. 2 J. R. Alford, center of Blk. No. 32, T. J. Moore Sur. ..... S.D. 750 ft.
Hasting and Dodson's No. 1 E. B. Alford, center of Blk. No. 27, T. J. Moore Sur. ..... Derrick.
Hathaway et al's No. 1 Gray, J. M. McLain Sur. ..... S.D. 3,640 ft.
Haynes Drilling Co.'s No. 1 Clark Lee, due S offset to Venerable's No. 1 Flannigan, M. J. Pru Sur. ..... Location.
Heiden-Rodgerson et al's No. 1 Barton and Birdwell, N offset to Reisinger et al's No. 1 Barton, W. G. Tutt Sur. ..... Fishing for tubing; T.D. 3,792 ft.
J. Jeagens' No. 1 Needham, 330 ft. from N line of lease and 330 ft. from NE and 400 ft. from SE of survey, J. H. Chambers Sur. ..... Drlg. 860 ft.
W. C. Know's No. 1 W. D. Peterson, center of 3.75-ac. tract, Jacob Lewis Sur. ..... S.D. 2,200 ft.; rig moved off.
Louisiana Oil & Refining Co.'s No. 1 H. Kersh, 330 ft. from N and E lines of 80-ac. lease, Jos. McAllister Sur. ..... Derrick.
Marr Drilling Co.'s No. 1 John Retting, 330 ft. from N line and 1,650 ft. from E line of tract, J. H. Sparks Sur. ..... Cored sandy shale 3,692 ft.
Merrick Drilling Co.'s No. 2 George Thompson, 150 ft. from S line and 216 ft. from W and E lines of 10-ac. lease, H. Hobson Sur. ..... Set csg.; T.D. 3,695 ft.
Mid-Kansas Oil & Gas Co.'s No. 1 Peter Tipps, 330 ft. from N and W lines of lease, Peter Tipps Sur. ..... Set csg. 3,620 ft.
Mid-Kansas Oil & Gas Co.'s No. 1 M. A. Price, 210 ft. from N line of road and 330 ft. from W line of lease, J. B. de Cadena Sur. ..... Set csg.; top sand 3,555 ft.
Murray Oil Co.'s No. 1 H. Sexton, center of 3-ac. lease, being center of 3-ac. of 10-ac. strip, M. McCabe Sur. ..... Drlg. 400 ft.
Paulett et al's No. 1 Ed Sparks, 350 ft. from E, 150 ft. from S of survey, L. C. Riggs Sur. ..... S.D. 1,465 ft.
Pierce and Moore's No. 1 Terrell, E offset to Sun's No. 2 Barker, E. G. Sevier Sur. ..... Set csg.; T.D. 3,689 ft.
Pointer and Duncan's No. 1 Hale, center of 1-ac. gin lot, John Darley Sur. ..... Drlg. 2,700 ft.
D. C. Reed et al's No. 1 M. L. Thompson, 35 ft. from N line and 150 ft. from W line of lease, F. Cordova and M. J. Pru Sur. ..... Drlg. 3,660 ft.
W. F. Reynolds' No. 1 H. Stoddard, 330 ft. from S line of road, 220 ft. from N line of lease, and 330 ft. from W line of Creek, Juan Ximenes Sur. ..... Rig up.
Richard and Watkins' No. 1 W. F. Neal, center of 1-ac. tract, T. H. Smith Sur. ..... Rig up.
Ross Seward's No. 1 Burton, J. J. Y'Barbo Sur. ..... T.D. 3,387 ft.
Smith and Sikes' No. 1 Frederick, 150 ft. S of SE cor. of E. D. Oil Co.'s Alford lease, I. G. Parker Sur. ..... Rig up.
Snider and Spradner's No. 1 Brightwell, 650 ft. from S line and 150 ft. from W line of lease, R. W. Smith Sur. ..... Rig up.
Stewart and Duffy's No. 1 Solar Jackson, 330 ft. from N and E lines of lease, P. W. Holmes Sur. ..... Derrick.
Talbert, trustee's No. 1 Maxwell, 150 ft. from most northerly S line and 150 ft. from most northerly W line of lease, I. G. Parker Sur. ..... Fishing 3,650 ft.
Torrance and DePrang's No. 1 Johnson, 18 ft. W and 362 ft. N of NW cor. of Stanolind's Christian tract, W. R. Cooke Sur. ..... Coring 3,706 ft.
R. H. Vice's No. 1 Neal Cooper, 315 ft. SW along NW line of Cooper tract and 141 ft. SE at right angles, T. J. Moore Sur. ..... Waiting on standard rig 3,797 ft.
R. H. Vice's No. 1 Alford, 153 ft. from N line of lease and 660 ft. W of O'Neal's No. 1 Alford, H. B. Dance Sur. ..... Set csg.; T.D. 3,809 ft.
Karl Witt et al's No. 1 H. B. Leverett, 140 ft. from S line and 110 ft. from W line of 2.5-ac. lease, J. Lindley Sur. ..... Derrick.

SMITH COUNTY

Perry Allen et al's No. 1 T. O. Wright, 250 ft. from E line of lease and 200 ft. N of Witherspoon's No. 1 Wright, J. Vargus Sur. ..... Drlg. 2,840 ft.
Golden Eagle Oil Co.'s No. 1 T. B. Collier, 137 ft. from S line and 150 ft. from E line of lease, J. Jordan Sur. ..... Derrick.
Golden Eagle Oil Co.'s No. 1 E. E. Moore, 330 ft. from N and E lines of 8-ac. lease, Juan Vargus Sur. ..... Derrick.
Golden Eagle Oil Co.'s No. 1 L. S. Sartain, center of 5-ac. lease, J. Jordan Sur. ..... Derrick.
Hooper et al's No. 1 Lule Jackson, 330 ft. S and 530 ft. E of most northerly SW cor. of Monroe Shell Robinson lease, E. Daniels Sur. ..... S.D. 3,815 ft.
Joiner et al's No. 1 C. S. Jackson ..... T.D. 4,045 ft.; S.D.
McRabie et al's No. 1 C. P. Hamilton, 330 ft. from S and E lines of 255-ac. tract, Jackson Rector Sur. ..... Derrick.
Mundt et al's No. 1 W. E. Murray, 330 ft. from S and E lines of lease, 5 miles SE of Tyler, Marshall Wynn Sur. ..... Rig up.
Rabe et al's No. 1 Bateman, 332 ft. from S line and 278 ft. from E line of 15-ac. lease, James Jordan Sur. ..... Drlg. 3,650 ft.
Sun Oil Co.'s No. 1 Hudnott and Melton, 2,310 ft. from N line and 330 ft. from E line of lease, M. D. L. S. Coy Sur. ..... Location.
Sun Oil Co.'s No. 1 Hodnett and Melton, 2,310 ft. from N line and 330 ft. from E line of lease, M. D. L. S. Coy Sur. ..... Rig up.
Alph Tillman et al's No. 1 Jessie Cole, 137 ft. from E line and 375 ft. from N line of 32-ac. lease, center of 5-ac. lease, James Jordan Sur. ..... Waiting on cmt. to set; T. D. 3,761 ft.
Virgo Oil Co.'s No. 1 Carson, 355 ft. from N line and center of E and W lines of 4.85-ac. lease, B. W. Campbell Sur. ..... Spudding.
Zion Oil Co.'s No. 1 J. Wilson, 219 ft. from S line and 330 ft. from E line of 10-ac. lease, James Jordan Sur. ..... Drlg. 3,300 ft.

TITUS COUNTY

Perry V. Cook's No. 1 M. C. Rogers, center of SW of Moore Sur. ..... T.D. 4,212 ft.

UPSHUR COUNTY

Burnham and Johnston's No. 1 G. T. Shelton, 160 ft. from S line of lease and N offset to E. & D.'s No. 2 Free, William King Sur. ..... Testing 3,741 ft.
Champlin and Bass' No. 1 Brawley, 753 ft. from S line and 330 ft. from W line of 56-ac. lease, McKinley and Williams Sur. ..... Rig up.
Cranfill & Reynold's No. 1 Laney Graves, 330 ft. from S and E lines of lease, M. Irwin Sur. ..... Set csg.; T.D. 3,653 ft.
Everetts Oil Co.'s No. 4 A. J. Sanders, 330 ft. from S and W lines of lease, T. Allen Sur. ..... Derrick.
Lewis Golding's No. 1 L. T. Mackey, 1,650 ft. NE along SE line from SE cor. of NW, S. Harrell Sur. ..... Set csg.; T.D. 3,725 ft.
Grover Hart's No. 1 Allen, 330 ft. from S and E lines of lease, one-half mile W of Mountain, Gonzales Sur. ..... Derrick.
Pat Hudson et al's No. 1 D. F. Smith, 330 ft. out of SE cor. of W 100 acres of the N 200 acres of the 272-ac. lease, 3 miles E and 1¼ miles N of Cranfill & Reynolds' No. 1 Rash, John Denson Sur. ..... Waiting orders 3,710 ft.
McMurphy's No. 1 E. A. Cobb, 330 ft. from S and E lines of 54-ac. lease, John Lout Sur. ..... Drlg. 2,625 ft.
Perrin and Fell's No. 1 W. N. Landers, 220 ft. from N line and 1,088 ft. from W of lease, G. W. Hooper Sur. ..... Drlg. 3,255 ft.
Scott & Ashford's No. 1 Dusbrates, 772 ft. from N line and 2,805 ft. from E line of lease, Del Torres Sur. ..... Drlg. 3,243 ft.
E. L. Smith et al's No. 1 E. A. Watts, 330 ft. from S and W lines of lease, C. H. Cooper Sur. ..... Rig up.
Turnbow's No. 1 D. C. Shelton, center of 2½-ac. tract, Wm. King Sur. ..... Derrick.
Twin Oil Co.'s No. 1 C. J. Markey, 330 ft. from S and E line of lease, J. M. Pineda Sur. ..... Coring 3,681 ft.
Wadley-Evans and Lions' No. 1 C. R. Covin, 330 ft. from N line and center of E and W lines of 50-ac. tract, J. Loute Sur. ..... Moving in.
Watson's (formerly Kinsey) No. 1 D. F. Smith, 466 ft. from S line and 1,165 ft. from E line of 266-ac. tract, J. R. Davis Sur. ..... S.D. 1,856 ft.
I. Z. Werby et al's No. 1 Williams, 263 ft. from N line and 248 ft. from W line of 5-ac. tract, McKinley and Williams Sur. ..... Drlg. 2,010 ft.

VAN ZANDT COUNTY

Barton et al's No. 1 C. L. Hubbard, 600 ft. out of NE cor. of Hubbard 225-ac. tract, 3½ miles S of Canton, M. J. McCadena Sur. ..... S.D. 2,405 ft.
Kelly O. & G. Co.'s No. 1 Lemsford, center of Lemsford tract, John Conner Sur. ..... S.D. 2,300 ft.
Pure Oil Co.'s No. 1 A. E. Ellison, 150 ft. S and E of NW cor. of lease, John Walling Sur. ..... Testing.
Pure Oil Co.'s No. 14 R. L. Wells, 600 ft. W of E line and 550 ft. N of S line of lease, Mund Gross Sur. ..... Testing.
Pure Oil Co.'s No. 3 W. E. Morris, 250 ft. S of N line and 250 ft. E of W lines of lease, John Walling Sur. ..... Set surface csg.
Pure Oil Co.'s No. 3 A. R. Humphreys, 675 ft. W of E lines and 225 ft. S of N lines of lease, A. McPhail Sur. ..... Set surface csg.

Pure Oil Co.'s No. 4 H. C. Gilbert, 250 ft. N of S lines and 300 ft. W of E lines of lease, Mund Gross Sur. ..... Set surface csg.

Pure Oil Co.'s No. 3 B. W. Camper, 250 ft. E of W lines and 250 ft. S of NE cor. of Mrs. C. White 45-ac. lease in John Walling Sur. ..... Set surface csg.

A. C. Rowan's No. 1 W. E. Price, 150 ft. from N line and 150 ft. from W line of 28-ac. tract, John Walling Sur. ..... Drlg. 600 ft.

Roy Stumpff's No. 1 M. L. Riggs, 165 ft. from E line and 250 ft. from S line of tract No. 2 and 330 ft. from E line of lease, 4 miles NE of Van, William Daniel Sur. ..... Derrick.

Van Oil Association's No. 1 Tankersley, 200 ft. from E and 1,000 ft. from S of farm, L. Landers Sur. ..... T.D. 2,850 ft.

WOOD COUNTY

De Canther's No. 1 N. L. McLain, 350 ft. from N line and 642 ft. from E line of tract, Sam Brooks Sur. ... S.D. 3,344 ft.

W. B. Saulsbury's No. 1 T. H. Peters, 600 ft. from S line and 200 ft. from E line of 320-ac. tract and survey, 4 miles E of Mineola, W. B. McNutt Sur. ..... Rig up.

Talko Oil Co.'s No. 1 G. T. Ross, B. L. Smith Sur. ..... Fishing 3,840 ft.

Wood County Dev. Co.'s No. 1 Davis, approximately 180 ft. from S line of 160-ac. tract and 2¼ miles S of Kantes in Sarah McDonald Sur. ..... Drlg. 2,665 ft.

Wildcat Operations in West Texas

(Continued from Page 39)

HOWARD COUNTY

American-Maracaibo's No. 5-A Settles, 1,896 ft. from N, 1,884 ft. from W, Sec. 6, Blk. 32, T.&P. Sur. ..... S.D. 185 ft.

Amerada Pet. Corp.'s No. 5 Coffee, 2,310 ft. from N and 1,650 ft. from W, Sec. 22, Blk. 33 ..... T.P. 2,215 ft.; T.D. 3,290 ft.; 1,300 ft. oil in hole.

Green O. & R. Co.'s No. 1 Denman, 990 ft. from S and 2,310 ft. from W, Sec. 14, Blk. 30, Twp. 1s, T.&P. Sur.. Spudded and S.D.

Merrick & Lamb's No. 4 Chalk, 1,650 ft. from N and 990 ft. from W, Sec. 125, Blk. 29, W.&N.W. Sur. ..... Csg. cmtd. 1,603 ft.

Myers et al's No. 1 Denman, 2,305 ft. from S and 2,320 ft. from E Sec. 14, Blk. 30, Twp. 1s, T.&P. Sur. ... S.D. 1,030 ft.

McCastin-Smith's No. 1 Roberts, 2,440 ft. from N and 643 ft. from E, Sec. 128, Blk. 29, W.&N.W. Sur. ..... Rotary rig.

Pure Oil Co.'s No. 13 Chalk, 330 ft. from N and E, Sec. 125, Blk. 29, W.&N.W. Sur. ..... Derrick.

Sinclair-Prairie Oil Co.'s No. 3 Dodge, 1,650 ft. from S and 429 ft. from W, Sec. 11, Blk. 30, Twp. 1s, T.&P.. S.D. 1,075 ft.

IRION COUNTY

Davis et al's No. 1 Suggs, 1,560 ft. from S and 935 ft. from W, Sec. 3,051, Blk. 38, H.&T.C. Sur. ..... Drlg. 3,250 ft.

Stanolind Oil & Gas Co.'s No. 1 Williams, 1,320 ft. from S and E of Sec. 1,196, T.T.R.R. Sur. ..... S.D. 6,519 ft.

JONES COUNTY

Abers et al's No. 1 Burton, 150 ft. from S and 175 ft. from E of 43.4-acre tract in G. Martinez Sur. ..... S.D. 1,005 ft.; temp. abnd.

Johnson's No. 1 Huddleston, 165 ft. from S and W of N half of N half of Sec. 39, Blk. 15, T.&P. Sur. ..... Spudded and S.D.

J. M. Johnson's No. 1 Swann, 4,150 ft. from S and 1,550 ft. from E, I. Miley Sur. ..... S.D. 2,527 ft.

Robert Oil Co.'s No. 1 Swann, 2,350 ft. from W and 2,920 ft. from S, I. Miley Sur. ..... T.D. 2,541 ft.; T.P. 2,503 ft.; on pump.

Smart & Reynolds' No. 1 Reynolds, 2,500 ft. from N and 150 ft. from W, Sec. 1, W. T. Scott Sur. No. 3. S.D. 175 ft.

Southern Oil Co.'s No. 1 Sears, 300 ft. from S and W J. H. Grayson Sur. ..... Drlg. 2,560 ft.

C. S. Spelling et al's No. 1 Lillie, 300 ft. from N and W Sec. 4, E. Miller Sur. No. 2 ..... S.D. 1,751 ft.

Transcontinental Prod. Co.'s No. 1 Rust, 2,000 ft. N and 995 ft. W of SE cor. J. J. Hughes Sur. 556 ..... Spudded.

Ungren & Frazier's No. 2 King, 465 ft. from N, 150 ft. from E, Subd. 6, M. Bueno Sur. ..... Rigged up.

Young et al's No. 1 Harrell, 150 ft. from S and E of N half of Sec. 8, O.A.L. Sur. ..... Location.

LOVING COUNTY

Eppenauer Drlg. Co.'s No. 1 Victor, 2,310 ft. from NE and 330 ft. from SE Sec. 4, Blk. 2, W.&N.W. Sur. ... Spudded and S.D.

Ervin & Mahres' No. 1 Thrope, 2,310 ft. from E and 330 ft. from S, Sec. 46, Blk. 53, T.&P. Sur. ..... S.D. 810 ft.

Fair Lawn Syndicate's No. 1 Brookfield, 330 ft. from N and W, Sec. 30, Blk. 29, P.S.L. ..... T.D. 4,778 ft.; gas at 4,776 ft.; show oil 4,850 ft.

Goldman et al's No. 1 Allen, 330 ft. from NE and NW of Sec. 90, Blk. 1, W.&N.W. Sur. ..... S.D. 3,368 ft.

Goldman et al's No. 2 Allen, 330 ft. from NW, 2,310 ft. from SW, Sec. 90, Blk. 1, W.&N.W. Sur. ..... Material on ground.

Goldman et al's No. 1 Reagan-McElvain, 330 ft. from NE, 2,310 ft. from NW, Sec. 84, Blk. 1, W.&N.W. Sur.. Cellar.

Lewis & Siegel's No. 1 Johnson, 330 ft. from N and 1,650 ft. from W, Sec. 6, Blk. 54, Twp. 1, T.&P. Sur.. S.D. 2,280 ft.

Martin et al's No. 1 Wheat, 990 ft. from SW and SE, Sec. 82, Blk. 1, W.&N.W. Sur. ..... Rig.

Miller et al's No. 1 Ferguson, 990 ft. from NE of Sec. 44, Blk. 29 ..... Spudded and S.D.

Thomas' No. 1 Wheat, 2,310 ft. from NW, 990 ft. from NE, Sec. 83, Blk. 1, W.&N.W. Sur. ..... Redrilling 3,660 ft.

Trinity Drlg. Co.'s No. 1 Wheat, 2,310 ft. from SW, 330 ft. from SE, Sec. 3, Blk. 2, W.&N.W. Sur. .. .. S.D. 1,300 ft.

MENARD COUNTY

Priest's No. 1 Sorrel, 1,000 ft. from S and 200 ft. from S cor., Sec. 132, E.L.&R.R. Sur. ..... S.D. 2,860 ft.

PECOS COUNTY

Adams et al's No. 1 Shearer, 1,650 ft. from SE and 330 ft. from NE Sec. 101, Blk. 16 H.&G.N. Sur. ..... Drlg. 1,070 ft.; show oil and gas 775 ft.

Aero Gas & Royalty Co.'s No. 2 Byrne, 1,470 ft. from NW and 1,500 ft. from SW, Sec. 54, Blk. 10, H.&G.W. Sur. ..... S.D. 1,265 ft.

Cardinal Oil Co.'s No. 1-K Tippett, 1,650 ft. from S and 330 ft. from E. Sec. 61, Blk. 194, G.C.&S.F. Sur... Set csg. 360 ft.; show oil here.

Corvette Oil Corp.'s No. 8 H. Monroe, 1,040 ft. from E line and 150 ft. from N line of Sec. 39, G.C.&S.F. Sur., Blk. 194 ..... Location.

Davis et al's No. 1 University, 1,650 ft. from S and 330 ft. from E, Sec. 31, Blk. 16 ..... Cellar.

Hampton et al's No. 1 Byrne, 1,980 ft. from NW and 1,500 ft. from NE, Sec. 54, Blk. 10, H.&G.N. Sur. S.D. 1,395 ft.; T.P. 1,356 ft.

Messinger et al's No. 1 Jones, 1,300 ft. from NW, 1,290 ft. from SW, Sec. 5, Blk. 9, E.&G.N. Sur. ..... Rigging up.

New State Oil Co.'s No. 1 Tippett, 1,349 ft. from S and 330 ft. from E, Sec. 40, Blk. 194, G.C.&S.F. Sur. ..... S.D. 1,469 ft.; flowing 50 bbls. per day.

PRESIDIO COUNTY

Sadler et al's No. 1 Bledsoe, 2,640 ft. from N and W Sec. 15, Blk. 354, G.C.&S.F. Sur. ..... S.D. 328 ft.

REAGAN COUNTY

Big Lake Oil Co.'s No. 7-C University, 1,570 ft. from W and 725 ft. from S, Sec. 25, Blk. 9 ..... Killed well 8,310 ft. to run csg.; T.P. 8,116 ft.

Big Lake Oil Co.'s No. 8-C University, 710 ft. from S and 2,410 ft. from E, Sec. 13, Blk. 2 ..... Rigging up rotary.

Big Lake Oil Co.'s No. 9-C University, 2,410 ft. from N and 765 ft. from E, Sec. 13, Blk. 2 ..... Building rig.

Continental Oil Co.'s No. 6-B University, 765 ft. from N and 1,980 ft. from W, Sec. 36, Blk. 9 ..... Building rig.

Group Oil Corp.'s No. 5-B University, 2,706 ft. from S and 1,775 ft. from W, Sec. 36, Blk. 9 ..... Drlg. 5,880 ft.

REEVES COUNTY

F. McDorman et al's No. 1 Ray Roberts et al, 2,310 ft. from S and E lines of Sec. 22, Blk. 59, P.S.L. Sur. ... S.D. 1,902 ft.

Southern Star Oil Co.'s No. 1 Wright, 1,320 ft. from S and W, Sec. 58, Cassel's Sur. ..... S.D. 250 ft.

RUNNELS COUNTY

Blue Bonnett Oil Co.'s No. 1 McMillan, 1,365 ft. from N and 660 ft. from W, Sec. 22, N. Travis Sur. ..... T.D. 2,522 ft.; T.P. 2,520 ft.; flowing 50 bbls. daily.

Dutton et al's No. 1 Dean, 5,475 ft. from NE and 1,048 ft. from NW in J. Heil Sur. No. 519 ..... S.O. 3,417-20 ft.; S.D. 3,600 ft.

SCHLEICHER COUNTY

Eastland Oil Co.'s No. 1 Joe Tisdale, C Sec. 39, Blk. M, G.H.&S.A. Sur. ..... T.D. 5,410 ft.; fishing.

Wesner et al's No. 1 Nicks, 2,310 ft. from N and 2,302 ft. from E of Sec. 77, Blk. LL, T.C. Sur. ..... S.D. 5,580 ft.

George Wilson's No. 1 Page, Sec. 40, Blk. L, 1,290 ft. from N, 1,570 ft. from W, G.H.&S.A. Sur. ..... S.D. 5,052 ft.

SCURRY COUNTY

G. E. Dickman et al's No. 1 F. C. Davis, 1,000 ft. N and 1,770 ft. W of SE cor. of Sec. 275, Blk. 2, E.&T.C. Sub. ..... S.D. 5,100 ft.

Heinzleman et al's No. 1 Hood, 436 ft. from N and 439 ft. from E, Sec. 87, Blk. 3, H.&T.C. Sur. ..... Spudded and S.D.

Scurry County Oil Exchange's No. 1 Earnest, 2,310 ft. from N and W, Sec. 68, Blk. 3, H.&G.N. Sur. ..... Spudded and S.D.

Seifert & Dibble's No. 1 T. M. Blackburn, 2,310 ft. from N and 2,310 ft. from W line of Sec. 153, Blk. 97, H.&T.C. Sur. ..... S.D. 4,992 ft.

TAYLOR COUNTY

Dunigan et al's No. 2 Hunter, 2,387 ft. from N and 3,567 ft. from E of Sec. 27, W. R. Wills Sur. No. 122.. T.D. 1,850 ft.; set 8-in. csg.

TERRELL COUNTY

Big Bend Oil Co.'s No. 1 Bassett, C NW Sec. 155, Blk. D, M.-K.-T. Sur. ..... S.D. 2,269 ft.

Keck Pecos Trust Co.'s No. 1 Hamilton, C Sec. 6, Georgetown Ry. Sur. ..... S.D. 2,150 ft.; moved off tools

McPhee-Briggs' No. 1 Kerr ..... Derrick.

Miller Bros. No. 1 Allison & Burke, C NW Sec. 16, Blk. 176, T.&P. Sur. ..... S.D. 120 ft.

Mid-Kansas Oil & Gas Co.'s No. 1 Goode, 2,152 ft. from E and 330 ft. from S. Sec. 26, Blk. 161, G.C.&S.F. Sur.. S.D. 6,120 ft.

Jones et al's No. 1 Pankenham, C SE NW Sec. 48, Blk. B-3, C.C.S.D.&R.G.N.G. Sur. ..... S.D. 2,545 ft.

Sides et al's No. 1 Phelps, 2,157 ft. from N and 2,482 ft. from W, Sec. 5, G. W. Hurley Sur ..... Drlg. 2,885 ft.

TOM GREEN COUNTY

Belding & Dutton's No. 1 Norsworthy, 1,640 ft. from S and 587 ft. from E of John McNeese Sur. ..... S.D. 760 ft.; S.O. and gas 735 ft.

Mintex Oil Co.'s No. 1 Campbell Est., 446 ft. from S and 630 ft. from W of Sec. 180, Dist. No. 11, S.P. Sur... S.D. 1,994 ft.

Pratt & Hancock's No. 2 Lewis, 100 ft. N and 330 ft. E of most northerly SW cor. of Joshua S. Grant Sur. No. 2 ..... S.D. 200 ft.

UPTON COUNTY

Clark-Cooper's No. 1 Lane, 2,310 ft. from N and 990 ft. from E Sec. 36, Blk. 1, M.-K.-T. Sur. ..... Drlg. 525 ft.

Hope Pet. Co.'s No. 2 Lane, 2,310 ft. from N, Sec. 36, Blk. 1, M.K.&T. Sur. ..... Drlg. 1,010 ft.

White's No. 1 Lane, 2,310 ft. from S and 990 ft. from E Sec. 36, Blk. 1, M.-K.-T. Sur. ..... Spudded and S.D.

VAL VERDE COUNTY

Couch et al's No. 1 J. P. Yoas, 1,300 ft. from the N line and E line of Sec. 21, Blk. 1, L.&G.N. Sur. ..... S.D. 400 ft.

O. O. Owens' No. 1 Mills, Sec. 138, Blk. 1, L.&G.N. Sur., elev 2,130 ft. ..... S.D. 6,780 ft.

WARD COUNTY

Abell Bros. et al's No. 1 Smith, 330 ft. from NE and NW, Sec. 4, Blk. 34, H.&T.C. Sur. ..... S.D. 2,265 ft.

Atlantic Oil Prod. Co.'s No. 2 Barrow, 1,650 ft. from NE and 330 ft. from NW Sec. 23, Blk. 8, H.&T.C. Sur.... S.D. 100 ft.

Barnsdall Oil Co.'s No. 2 Henry, 990 ft. from SE and 330 ft. from NE, Sec. 38, Blk. B-29, P.S.L. Sur..... Drlg. 2,250 ft.

Caprito et al's No. 1 Beatty, 330 ft. from SW and 990 ft. from SE, Sec. 3, Blk. 34, H.&T.C. Sur. ..... Drlg. 2,283 ft.

Eastland Oil Co.'s No. 2 Weiss, 1,091 ft. from SW and 2,365 ft. from SE, Sec. 4, Blk. 34, E.&T.C. Sur. ..... Drlg. 542 ft.

Eastland Oil Co.'s No. 1-A Weiss, 2,364 ft. from SE, 332 ft. from SW, Sec. 4, Blk. 34, H.&T.C. Sur. ..... Ran csg. 2,162 ft.

Eastland Oil Co.'s No. 2 Green, 2,364 ft. from NW and 330 ft. from SW, Sec. 4, Blk. 34, H.&T.C. Sur. ..... Location.

Eppenauer's No. 1 Purcell, 365 ft. from SW and 1,650 ft. from SE of Sec. 17, Blk. 14, H.&T.C. Sur. ..... T.D. 2,740 ft.

H. V. Greer's No. 1 Carr, 150 ft. from NW and 510 ft. from SW, Sec. 12, Blk. 5, H.&T.C. Sur. ..... S.D. 2,823 ft.

Gulf Production Co.'s No. 32 O'Brien, 1,100 ft. from N and 330 ft. from E, Sec. 16, Blk. F, G.M.M.B.&A. Sur. ..... Cleaning out 2,758 ft.

Gulf Prod. Co.'s No. 12 Hutchings, 330 ft. from N, 990 ft. from W, Sec. 3, Blk. F ..... Drlg. 2,600 ft.

Kregle et al's No. 1 Heasler, 3,062 ft. from SE, 330 ft. from NE, Sec. 46, Blk. 34, H.&T.C. Sur. ..... Underreaming csg. 525 ft.

Landreth Prod. Co.'s No. 1 Barker, 330 ft. from NW, 437 ft. from NE, Sec. 27, Blk. B-29, P.S.L. Sur. ..... Drlg. 2,110 ft.

Leidecker et al's No. 2 Bennett, 2,310 ft. from NW and 1,650 ft. from NE, Sec. 16, Blk. 34 ..... Derrick.

Maxwell's No. 1 Brilhart, 2,310 ft. from NE and SE Sec. 13, Blk. 34, H.&T.C. Sur. ..... S.D. 20 ft.

R. F. Owen's No. 1 Lea, 1,344 ft. from NW and 4,632 ft. from SW, Sec. 1, J. Howe Sur. ..... S.D. 2,040 ft.

Penn Oil Co.'s No. 1 York, 2,310 ft. from NW and SW Sec. 10, Blk. 34, H.&T.C. Sur. ..... S.D. 2,265 ft.; 4,000,000 ft.; dry gas 2,260 ft.; rebuilding rig

Penn Oil Co.'s No. 1 Hardage-Wilson, 330 ft. from NE and SE Sec. 11, Blk. 34, H.&T.C. Sur. ..... Cellar.

Rector Oil Co.'s No. 1 Monroe, 660 ft. from NE and SE, Sec. 62, Blk. 33, H.&T.C. Sur. ..... S.D. 2,535 ft.

Renaud-Prettyman's No. 1 University, 330 ft. from N and E Sec. 4, Blk. 16 ..... Plugging back from 2,763 ft.

Richardson's No. 10 O'Brien, 1,897 ft. from N and 990 ft. from W Sec. 5, Blk. F ..... Drlg. 1,305 ft.

Rixford-Fuglarr's No. 1 London, 660 ft. NW, 330 ft. NE E cor. Sec. 10, Blk. 32, H.&T.C. Sur., but in Sec. 8 ..... Drlg. 910 ft.

Stanolind Oil & Gas Co.'s No. 2 Weiss, 330 ft. from SW and 1,310 ft. from SE, Sec. 4, Blk. 34, H.&T.C. Sur... Drlg. 375 ft.

Stanolind O. & G. Co.'s No. 3 Weiss, 1,310 ft. from SE and 1,118 ft. from SW, Sec. 4, Blk. 34, H.&T.C. Sur... Location.

T P. Coal & Oil Co.'s No. 4 James, 330 ft. from NE and 2,365 ft. from SE, Sec. 5, Blk. 34, H.&T.C. Sur. ..... To test: T.D. 2,401 ft.

Thomas et al's No. 1 Bennett, 2,310 ft. from NE and SE, Sec. 16, Blk. 34, E.&T.C. Sur. ..... Cmtd. csg. 2,263 ft.

Weekly Oil Corp. and L. E. Fultz' No. 1 Burks, 330 ft. from SE and 1,320 ft. from SW, Sec. 26, Blk. B-29, P.S.L. Sur. ..... Drlg. 915 ft.

White et al's No. 1 Burtner, 150 ft. from NE and 515 ft. from SE of Sec. 8, Blk. 32, H.&T.C. Sur. ..... S.D. 755 ft.

WINKLER COUNTY

Sid Richardson et al's No. 1 Scarborough, 1,650 ft. from N and W, Sec. 1, Blk. 77, P.S.L. Sur. ..... Drlg. 2,150 ft.

Sid Richardson et al's No. 2 Sealy estate, 1,650 ft. from S and 330 ft. from W. Sec. 94, Blk. A, G.M.M.B.&A. Sur. ..... Rigging up machine.

NATIONAL
STUFFING BOX
CASING HEAD
FORGED STEEL—TYPE C

STRENGTH . . . Body forged from A. P. I. Grade C steel . . . split gland and seat of steel castings . . . outlet of extra heavy steel, electric arc-welded to the body.

SAFETY . . . Each body is given a 1000-pound test before shipment . . . test loads of more than twice the weight of the average casing string have been placed on the assembly.

ECONOMY . . . An efficient all-steel head, amply strong, yet light in weight and easy to handle, furnished at materially reduced prices.

Available in the most commonly used sizes, with one 2-inch outlet furnished as standard. Descriptive literature free on request.

THE
NATIONAL SUPPLY
COMPANIES

Fields Show Decline in Gasoline Production

(Continued from Page 29)

same period this year, or a decrease of 63,800,000 gallons.

The Seminole Field accounted for 56,800,000 gallons of this decrease, or approximately 90 per cent of it. The effect of the Seminole decline thus greatly overshadowed the 13,000,000-gallon increase in the Oklahoma City Field output.

The showing could have been different, however, for while the Seminole Field was held in due to prorating crude runs and natural gasoline plant operations were curtailed due to the weak market for the product, the effect of these was substantially less than was witnessed in the Oklahoma City Field. Considering the total capacity of the plants in the Oklahoma City Field and the potential wet gas supply, that field could have produced from 6 to 10 times the volume actually produced.

Texas also showed a substantial reduction in its output comparing the two seven-month periods. Here, however, there is not the shifting of production shown in the other two important states. Because the East Texas Field does not produce large quantities of wet gas there has been no cause for an increase to be shown, and no sharp drop in production occurred during the past two years because the gas processed came from settled production. In the accompanying table is shown the production for the first seven months of 1931 compared with that for the first seven months of 1932:

REDUCE EAST TEXAS RATES

FORT WORTH, Tex., Sept. 3.—The Interstate Commerce Commission has granted permission to railroads to cut their rates on petroleum shipments from the East Texas district, effective August 11. The new rate on gasoline shipments to Galveston, Port Arthur, Houston, Texas City, Baytown, and Beaumont is 11 cents per 100 pounds instead of 15 cents, and the new rate on crude is 8.8 cents per 100 pounds or 27.35 cents per barrel instead of the old rate of 11 cents plus 1.1 cents emergency tariff of 37.61 cents per barrel.

These rates will make it possible for East Texas crude and refined products to reach gulf coastal and eastern seaboard markets much cheaper than formerly, and will no doubt stimulate tank car shipping, especially in view of the fact that the pipe lines out of the district will only carry 43 bbls. per day from each well, leaving an additional 7 bbls. to be shipped out by other methods by the well owners.

JACKSON GAS FIELD PRESSURE

JACKSON, Miss., Sept. 5.—More than 10,000,000,000 feet of gas has been pulled from the Jackson gas field without any decrease in the field's rock pressure, according to the state oil and gas board. The rock pressure continues to hold at 980 to 1,000 pounds. The field was discovered in February, 1930. The total withdrawn by the United Gas system to July 1, 1932, was 8,227,273,000 feet. In July the pull was 465,050,000 feet. There are 95 producing gas wells at Jackson, 83 of which are connected with various pipe lines. The producing acreage is now estimated at 7,000 acres, with a total open flow of 3,100,000,000 feet.

Seminole Crude Oil

In Storage

FOR SALE

Apply to Box F320, care The Oil and Gas Journal, Tulsa, Okla. No brokers need apply.

N.P.A. Program Devoted to Economic Discussions

The thirtieth annual meeting of the National Petroleum Association, which will be held at Hotel Traymore, Atlantic City, N. J., September 14, 15 and 16, will feature a program and informal conference which will deal with subjects of immediate and timely interest to the oil industry, according to an announcement by Fayette B. Dow, general counsel of the association.

Among the subjects to be discussed are:

"The economic conditions confronting American business and corrective measures that are under way.

"Taxation—the problems arising out of the new Federal taxes on gasoline and lubricating oils—the battle against tax evasion.

"A discussion of fuel performance in the internal combustion engine.

"The economics of pipe line transportation in the oil industry.

"Progress in aviation. The antitrust laws.

"The controversy over regulation of the use of highways—the purposes of the newly organized Highways Users Conference."

It is also announced that important conferences on the immediate economic situation in the oil industry will be held.

ROCKY MOUNTAIN RUNS

Average daily pipe line runs from fields in the Rocky Mountain territory for the week ending September 3 follow:

	Bbls.
WYOMING	
Salt Creek	20,860
Big Muddy	1,520
Badger Basin	50
Byron-Garland	1,050
Dallas Derby	510
Dutton Creek	80
Elk Basin	470
Ferris	20
Frannie	140
Grass Creek	3,250
Greybull	0
Hamilton Dome	920
Hudson	410
LaBarge	930
Lance Creek	100
Lost Soldier	1,210
Mule Creek	0
Midway	120
Notches	0
Oregon Basin	80
Osage	1,200
Pilot Butte	30
Rex Lake	0
Rock River	1,100
South Casper	0
Poison Spider	230
Teapot	50
Warm Springs	70
Total Wyoming	34,400
MONTANA	
Buckley-Border	550
Cat Creek	850
Dry Creek	750
Kevin-Sunburst	4,140
Lake Basin	30
Pondera	1,070
Total Montana	7,390
COLORADO	
Florence	280
Fort Collins and Wellington	730
Iles Dome	580
Moffat	640
Orchard	210
Rangely	80
Tow Creek	260
Total Colorado	2,780
NEW MEXICO	
Artesia	508
Caprock	750
Hogback	390
Jal	925
Rattlesnake	700
Table Mesa	70
Eunice	512
Hobbs	25,118
Lea	2,178
Texas-Pacific	95
Total New Mexico	31,247
Total Rocky Mountain area	75,817
Total previous week	75,456
Difference	361

WOLVERINE AWARDS CONTRACT

OIL CITY, Pa., Sept. 3.—The Wolverine-Empire Refining Co. has awarded a contract for the construction of $60,000 improvements at its Reno refinery near here. The work will include the installation of new boilers and complete coal unloading plant.

Mid-Continent Refinery Operations Show Increase

(Continued from Page 11)

Company and location—	Daily capacity	Runs Sept. 1	Runs Aug. 1
Associated Petroleum Corp., Allen	8,000	(*)	(*)
Wilcox Oil & Gas Co., Bristow	5,500	2,500	3,500
Wirt Franklin Petroleum Corp., Ardmore	4,000	2,000	2,000
Yale Oil Corp., Yale	2,000	500	700
Fork Refining Co., Oklahoma City	3,900	200	600
Total	309,700	147,850	151,050

*Shut down.

REFINERY OPERATIONS IN KANSAS

(Plants which have been in operation during the past year)

Altitude Petroleum Corp., Chanute	5,000	(†)	(†)
Barnsdall Refineries, Inc., Wichita	4,000	2,000	2,250
Derby Oil Co., Wichita	7,500	4,000	4,000
Eldorado Refining Co., Eldorado	4,500	3,000	3,000
Golden Rule Refining Co., Wichita	1,500	900	900
Kanotex Refining Co., Arkansas City	12,000	6,000	6,500
National Refining Co., Coffeyville	6,500	5,000	5,000
Phillips Petroleum Co., Kansas City	7,500	6,000	6,000
Shell Petroleum Corp., Arkansas City	22,000	10,000	10,000
Sinclair Refining Co., Coffeyville	12,000	11,000	11,000
Sinclair Refining Co., Argentine	9,500	(*)	(*)
Skelly Oil Co., Eldorado	23,000	11,000	11,000
Standard Oil Co. of Kansas, Neodesha	20,000	6,000	6,000
Vickers Petroleum Co., Potwin	3,500	2,000	2,500
White Eagle Oil Corp., Augusta	15,000	12,500	12,000
Total	153,500	79,400	80,150

*Shut down. †Operating cracking stills.

REFINERY OPERATIONS IN NORTH CENTRAL TEXAS

(Plants which have been in operation during the past year)

Allstate Refining Co., Thrall	3,000	500	500
American Refining Properties, Wichita Falls	6,000	(*)	(*)
Archer Refining Co., Megargel	1,500	3,000	(*)
Atlantic, Pacific and Gulf Refining Co., Wichita Falls	5,000	500	(*)
Bobrose Oil & Refineries, Brownwood	2,000	(*)	(*)
Continental Oil Co., Wichita Falls	6,000	2,500	2,500
Dale Oil & Refining Co., Electra	4,000	(*)	(*)
Dixon Creek Oil & Refining Co., Kings Mill	3,500	1,000	1,000
Empire Oil & Refining Co., Gainesville	5,000	2,700	3,000
Falls Refining Co., Wichita Falls	2,000	350	500
Gratex Refining Co., Graham	500	130	150
Gulf Refining Co., Fort Worth	10,000	5,000	6,000
Humble Oil & Refining Co., Breckenridge	2,000	(*)	(*)
Humble Oil & Refining Co., Chilton	4,000	(*)	(*)
Humble Oil & Refining Co., Neches	5,000	1,700	1,700
Iowa Park Producing & Refining Co., Iowa Park	2,500	(*)	(*)
Kent Refining Co., Minerva	2,000	300	275
Kent Refining Co., Angus	4,000	(*)	(*)
LaSalle Petroleum Co., Burkburnett	3,500	200	230
Macmillan Petroleum Co., Isom	8,000	(*)	(*)
Magnolia Petroleum Co., Fort Worth, No. 1	12,000	4,000	4,000
Magnolia Petroleum Co., Fort Worth, No. 2	6,000	2,500	2,500
Magnolia Petroleum Co., Corsicana	5,000	4,000	4,000
Marathon Oil Co., Fort Worth	5,000	3,800	3,800
Moon Refining Co., Graham	300	100	100
Muenster Refining Co., Muenster	300	(*)	(*)
Olney Oil & Refining Co., Olney	2,500	2,000	1,750
Oriental Oil Co., Dallas	5,000	1,500	1,500
Panhandle Refining Co., Wichita Falls	5,000	2,300	2,300
Petroleum Refractionating Co., Pampa	6,500	5,000	5,000
Phillips Petroleum Co., Isom	18,000	17,500	17,500
Phoenix Refining Co., Inc., Dallas	3,000	600	600
Pilot Point Refining Co., Pilot Point	500	300	300
Primrose Refining Co., Wichita Falls	2,500	(*)	(*)
Shamrock Oil Co., Sunray	4,000	(*)	(*)
Sinclair Refining Co., Fort Worth	5,000	2,500	2,500
Simms Oil Co., West Dallas	4,500	3,000	3,000
Southland Refining Co., Olney	1,000	150	180
Star Refining & Producing Co., Fort Worth	1,500	700	700
Taylor Refining Co., Taylor	6,000	1,500	1,500
Taxman Refining Co., Wichita Falls	3,000	3,000	3,000
The Texas Company, Dallas	16,000	14,000	14,000
The Texas Company, Amarillo	4,000	2,800	2,800
Texas Pacific Coal & Oil Co., Fort Worth	3,800	2,800	2,800
Texas Pacific Coal & Oil Co., Caddo	1,000	600	550
Waggoner Refining Co., Electra	3,400	4,500	2,500
Wilcox Oil & Gas Co. (Pampa Refining Co.), Pampa	4,000	(*)	(*)
Young Refining Co., Archer City	250	(*)	(*)
Total	209,800	97,030	92,735

*Shut down.

REFINERY OPERATIONS IN NORTH LOUISIANA

(Plants which have been in operation during the past year)

Bayou State Refining Co., Hosston	750	250	300
Cedar Grove Refining Co., Shreveport	750	500	300
Louisiana Oil Refining Co., Shreveport, Bossier	19,000	18,000	18,700
Spartan Refining Co., Shreveport	10,000	6,000	6,000
Stanolind Oil & Gas Co., Superior	3,500	2,500	2,500
The Texas Company, Shreveport	7,000	(*)	(*)
Total	41,000	27,250	27,800

*Shut down.

REFINERY OPERATIONS IN WEST TEXAS

(Plants which have been in operation during the past year)

Bluebonnett Oil Refining Co., Wickett	5,000	(*)	(*)
Bobrose Oil & Refineries, Luling	2,500	(*)	1,500
Burford Oil Co., Pecos City	6,000	3,000	1,500
Coltex Refining Co., Colorado	10,000	6,200	5,000
Concho Refining Co., San Angelo	500	200	(*)
Cosden Oil Co., Big Spring	15,000	4,000	4,000
Grayburg Oil Co., San Antonio	6,000	700	650
Great West Refining Co., Big Spring	8,500	(*)	(*)
Gulf Refining Co., Sweetwater	5,000	3,000	4,000
Howard County Refining Co.	2,500	(*)	(*)
Humble Oil & Refining Co., San Antonio	5,000	1,600	1,600
Humble Oil & Refining Co., McCamey	15,000	(*)	(*)
Magnolia Petroleum Co., Luling	5,000	3,500	3,500
Marathon Oil Co., Del Rio	5,000	1,600	1,600
Misko Refineries, Inc., Laredo	1,500	850	850
Octane Refining Co., Beard	2,000	1,000	1,100
Paramount Refining Co., San Angelo	1,500	500	500
Pasotex Petroleum Co., El Paso	14,000	3,000	4,000
Phoenix Refining Co., Pettus	800	600	600
Pioneer Oil & Refining Co., Somerset	1,500	800	800
Richardson Refining Co., Big Spring	6,000	(*)	(*)
Rio Grande Oil Co., El Paso	6,000	800	1,000
Signal Gasoline Co., Texon	500	(*)	(*)
The Texas Company, San Antonio	3,000	2,500	2,500
The Texas Company, El Paso	2,000	900	700
Tonkawa Petroleum Co., Pyote	5,000	(*)	(*)
Texas Mexican Oil & Refining Co., Laredo	600	400	400
Texas Petroleum Products Co., Somerset	1,500	400	600
Wickett Refining Co., Wickett	2,500	400	500
Total	139,900	35,950	37,100

*Shut down.

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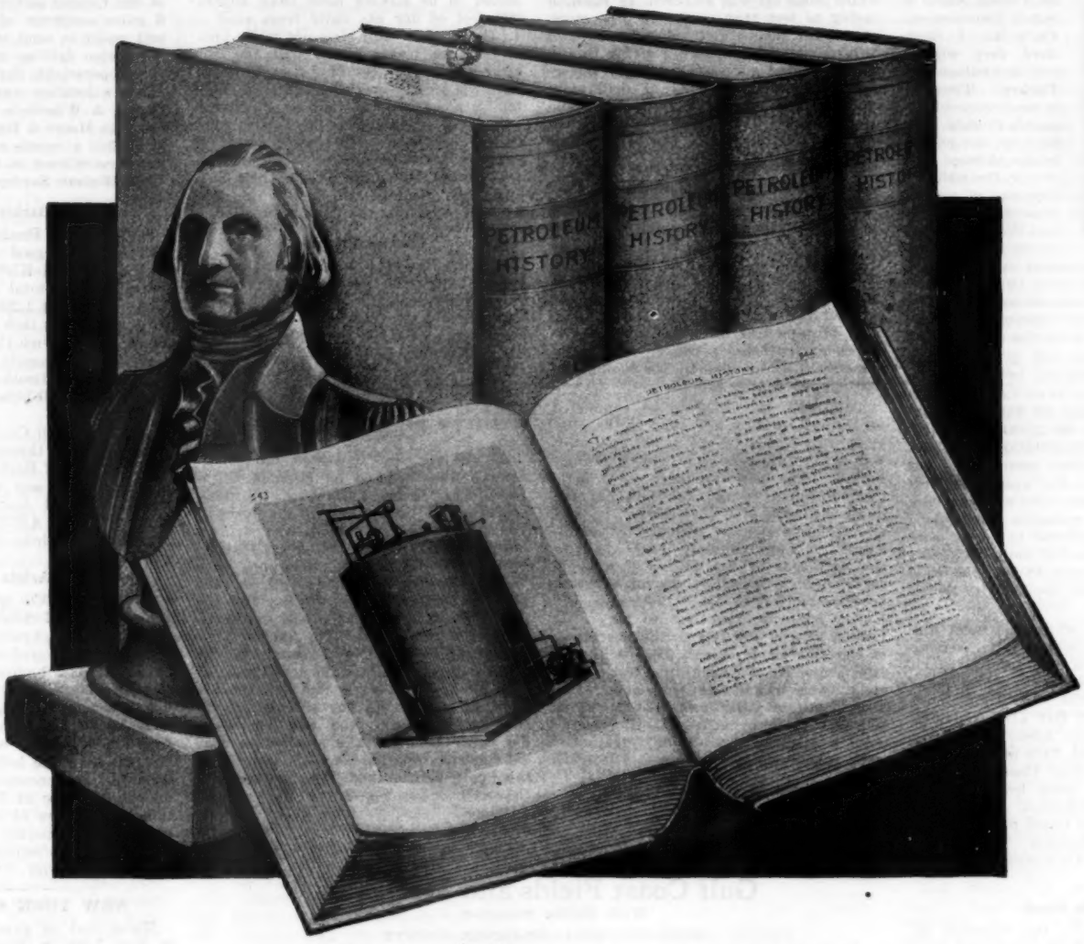

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Deepest Production in Gulf Coast Area Opened by a Wildcat Test in Matagorda County

By NEIL WILLIAMS
Staff Correspondent, Gulf Coast Fields

HOUSTON, Tex., Sept. 5.—Opening of another new Gulf Coast field was indicated the past week by United North & South Development Co.'s No. 1 Stoddard, deep wildcat test located on the Buckeye Townsite in west central Matagorda County. Cutting out the packer in the blowout preventer, the well has been out of control since it blew in late last Wednesday and as yet has not been completed but it is looked upon as proving up of a pool of some importance.

Efforts were being made to kill it after failure to rig up new connections to replace those cut out when the well blew in.

Production of the well as yet cannot be determined. Estimates of its size by authoritative sources have varied widely, the estimates ranging all the way from 300 bbls. daily up to 2,500 bbls. with from 20,000,000 to 30,000,000 feet of gas. The oil is coming from around the drill stem and is leaking out around connections of the Christmas tree and spraying in the air, making estimates very indefinite. Pressure is believed to be at least 1,500 pounds. Samples of the oil collected from the drippings show 18 per cent basic sediment and water, the gravity being 28.4 degrees.

The well blew in while drill stem was being pulled from the hole after setting of screen. A total of 120 feet of 4-inch screen was set in the sand, which is at a depth of 7,808-7,924 feet. Total depth of the hole is 7,926 feet after plugging back from 7,951 feet, where salt water sand was encountered. This is the deepest production on the Gulf Coast, the previous depth record being held by three wells southeast of Jennings, Acadia Parish, Louisiana, which found production in a 7,400-7,500-foot horizon. Those wells were Yount Lee Oil Co.'s Nos. 6, 7 and 8 Houssiere-Latrielle.

Controls Block

Although located in the townsite of Buckeye, which has been subdivided into small tracts, most of the ownership is a part of the Stoddard ranch, and as the United North & South Development Co. controls the block, consisting of more than 6,000 acres, there will be no competitive play. The depth of the wells in itself, however, would forestall any townsite drilling activity. The well is in the J. C. Keller Survey, although the block takes in part of the Cotton Survey.

United North & South Development Co., discoverer of the field, is the company which brought in the Luling Field of the fault zone, Southwest Texas. Buckeye is a geophysical prospect worked both with the torsion balance and the seismograph. It is believed to be a salt dome, but so far no salt has been drilled into as the discovery well is the first test drilled. This is the second field for Matagorda County, Markham so far having had the distinction of being the only production in the county. The latter is located less than 10 miles to the northwest. These two are the farthest west of the salt dome district fields.

The Buckeye well has been drilling since September, 1931. However, a bad luck omen seems to have hung over it almost from the start as drilling has been delayed by numerous fishing jobs. Most any other operator probably would have given the well up long ago. Several months ago the test encountered another oil sand with bottom at 7,828 feet, from which some oil was swabbed. In running casing to test that sand, the pipe stuck at several places and collapsed on two different attempts before a string finally was cemented successfully. Eight different attempts were made at drill stem tests but each failed. The present hole was sidetracked at 7,693 feet when efforts to pull screen in the old hole at 7,828 feet failed.

Manvel Completion

Among other important developments on the Gulf Coast during the week was the completion at Manvel, Brazoria County, of The Texas Company's No. 3 Belcher in sand at 3,992-4,009 feet. A little over 43 feet of 7-inch screen was set and the well came in flowing 1,000 bbls. of pipe line oil daily through one eleven-sixteenths-inch choke, showing a pressure of 725 pounds on the casing and 320 pounds on the tubing.

This well, the third to be completed at Manvel, opens a new sand in the Miocene. Production in the other two wells was in the Oligocene in a 5,400-5,600-foot horizon. The new producer is a little over 400 feet to the northwest of the discovery well, No. 1 Belcher. The second producer, now temporarily abandoned, is approximately 1,500 feet to the southeast of the discovery well. A rig already is being set up for a direct northwest offset to No. 3 Belcher on the Ewing property, that test to be No. 2 Ewing, located 400 feet to the northwest of the Belcher producer. This is in the direction of No. 1 Ewing, first test drilled at Manvel, which was abandoned at a total depth of 7,648 feet. The latter is 850 feet farther northwest. It encountered a number of sands although none made commercial production.

Mykawa Well Flowing Wild

At Mykawa, Harris County, Crown-Framer Oil Co.'s No. 1-A Siadous late in the week was still blowing wild after cutting out connections and was estimated to be making more than 40,000,000 feet of dry gas daily from sand at 4,121 feet. The well blew out while operators were preparing to bail the hole after setting 26 feet of 5⅛-inch screen. Mykawa, located on the outskirts of Houston, is a semiwildcat field in which several oil producers have been completed. Other wells have given trouble with high pressure gas. The present operators control a large part of the acreage, originally owned by Humble Oil & Refining Co., which brought in the first production.

Conroe Producer

One additional producer was brought in at Conroe the past week in Humble Oil & Refining Co.'s No. 4 South Texas Development Co. This well, in sand at a total depth of 5,193 feet, set 53 feet of 4¾-inch screen and came in flowing at the rate of 64 bbls. hourly through a three-eighths inch choke. It is a west offset to Heep Oil Corp.'s No. 1 Cartwright, the second well completed in the field.

At the close of the week interest at Conroe was centered on Humble Oil & Refining Co.'s No. 1 Dobbins, 1½ miles southeast of production in the Ransom House Survey. This well was drilling plug at 5,042 feet to test a sand at 5,093-97 feet. This well, which has been the highest well in the field on the Hockleyensis marker, is the key test for development of the field to the southeast. Bottom of the hole is 5,113 feet.

Alpha Oil Co.'s No. 1 Dunn, W. N. Reel Survey, cored a sand at 5,198-5,215 feet late in the week and is reported showing oil. Except for a little gas in the upper horizon, the test has been dry until now and has resulted in considerable speculation as it is located in the heart of the field. The majority of the wells have found the pay around 5,100 feet.

Craft & Gieseke's No. 1 South Texas Development Co., T.&N.O. Survey No. 9, has been given up definitely as being out of the Conroe picture. It is located some 6 miles southeast of the field and tested salt water in sand at 5,317-5,502 feet.

Routine drilling marked most of Conroe's operations during the week. Only one new location was reported, this being Brown & Wheeler's No. 1 Hooper, west offset to Moore & Bruton's No. 1 Hooper, completed a couple of weeks ago. It is in the 10-acre tract in the north end of the J. D. Watson Survey.

Barbers Hill

Texas Gulf Producing Co. has completed another good well at Barbers Hill in its No. 10-H Kirby, east flank, which in sand at a total depth of 5,107 feet came in flowing 1,200 bbls. daily through a five-eighths inch choke. At Rabbs Ridge, Fort Bend County, Gulf Production Co. and Humble Oil & Refining Co.'s No. 2-A F. I. Booth (second hole) came in flowing 1,000 bbls. daily from sand at 5,320 feet.

Rio Bravo Oil Co. has given up its attempt to drill through the overhang on the west side of Barbers Hill in its No. 3 Fisher, which was abandoned in anhydrite at 6,043 feet. This test drilled through salt at 4,975-5,364 feet but went back into anhydrite, in which it has been since.

Ariola Test

Houston Oil Co. and Republic Production Co.'s No. 1 Ariola Fee, first test on the Ariola geophysical prospect, Hardin County, encountered another sand at 4,151-71 feet. In a 12-minute drill stem test it flowed some oil and gas for 7 minutes and when drill stem was pulled there were 11 fourbles of oil and 5 fourbles of water. Gas volume was estimated at 1,000,000 feet. The hole is being deepened. This test has encountered several sands. In one of these at 3,262-86 feet indications were given of making a good well and opening another new field for the coast but on setting screen the test showed salt water.

Gulf Coast Fields and Wildcats

Week Ending September 3

WEST COLUMBIA—BRAZORIA COUNTY

Company, farm and location—	Remarks:
The Texas Company's No. 7 Abrams (W.O.), George Tennille Sur.	T.O. 3,131 ft.; rigging up to deepen.

BARBERS HILL—CHAMBERS COUNTY

R. E. Ferrell's No. 2 Wilburn, Henry Griffith League, 315 ft. W of No. 1 in center of 45-acre tract	T.D. 3,000 ft. in shale; fishing.
Humble Oil & Ref. Co.'s No. 1 Kirby, Henry Griffith League, 208 ft. from S line and 100 ft. from E line of lease	Rigging up.
Mills Bennett Prod. Co.'s No. 1-B Barber (W.O.), Henry Griffith League	Coring shale 6,009 ft.
Mills Bennett Prod. Co.'s No. 2 Gulf-Fisher (W.O.), Wm. Bloodgood Sur.	Milling out B.P.V. to deepen.
Mills Bennett Prod. Co.'s No. 4 Kirby, Henry Griffith League, 200 ft. W of No. 3	Drlg. salt 2,540 ft.; T.S. 1,370 ft.
Rio Bravo Oil Co.'s No. 3 Fisher, Wm. Bloodgood Sur., 300 ft. E and 33 ft. S of NW cor. of tract	Abnd. in anhydrite 6,043 ft.
Sun Oil Co.'s No. 3 Higgins, Wm. Hodges Sur., 50 ft. from E line of tr. and direct offset McAlbert Oil Co.'s No. 2-B Higgins	Drlg. rock 2,573 ft.
Texas Gulf Prod. Co.'s No. 3-C Kirby, 562 ft. from W line, 50 ft. from S line of "C" lease	Drlg. salt 2,405; T.S. 1,384 ft.
Texas Gulf Prod. Co.'s No. 4-C Kirby, Henry Griffith League, 356 ft. from W line and 50 ft. from S line of "C" lease	Drlg. rock 1,185 ft.
Texas Gulf Prod. Co.'s No. 11-A Kirby, Henry Griffith League, 1,950 ft. from W line and 325 ft. from S line of "A" lease	Drlg. cap rock 2,804 ft.
Texas Gulf Prod. Co.'s No. 10-H Kirby, Henry Griffith League, 50 ft. W of No. 3 Illrey	Set 23 ft. 3 in. of 5-in. (O.D.) screen 5,107 ft.; comp. flowing 1,200 bbls. daily, 200 lbs., ⅝-in. choke.
Texas Gulf Prod. Co.'s No. 11-H Kirby, Henry Griffith League, 150 ft. W of No. 10-H	Coring sand 3,990 ft.
Texas Gulf Prod. Co.'s No. 2 T. H. McLean, Henry Griffith League, 711 ft. from E line midway between C. Barber and McLean tracts on separating line	Spudded.
Texas Gulf Prod. Co.'s No. 3 O. K. Winfrey, W. D. Smith Sur., 295 ft. N of SW cor. of A. E. Barber lease and 100 ft. W of E line of Winfrey lease	Rig.

(Continued on Page 65)

NEW YORK SALES GAIN

Motor fuel or gasoline sold and used in New York in June represents an increase of 2.7 per cent over the amount reported for the same month of the preceding year. It was the first increase in four months. The total for the first six months ending June 30 also represents an increase above the first half year figures of 1931.

According to state reports, 148,774,871 gallons represent the tax paid motor fuel and refunds were allowed on 2,532,453 gallons leaving the net quantity taxable at 146,242,463 gallons. A year ago the same month the tax paid fuel was reported as 149,892,179 gallons, refunds 3,800,913 gallons, net quantity taxable 146,091,266 gallons. The net quantity taxable as reported for May, 1932, was 137,396,352 gallons.

DEATH OF HARRISON BEARDSLEY

NEW YORK, Sept. 3.—Funeral services for Harrison Beardsley, manager of the marine division of the Standard Oil Co. of New York, were held here this week, with burial following in Greenwood Cemetery. Mr. Beardsley, who was born in Brooklyn in 1878, has been connected with Standard Oil for more than 40 years. Poor health had kept him from his office for the past few months, and death occurred at Atlantic City, where he was spending a short vacation.

September Demand for Oklahoma Crude Oil Below August Figure 17,225 Bbls. Per Day

By W. A. SPINNEY
Staff Correspondent, Oklahoma Fields

The beginning of September shows a decline in the demand for crude from Oklahoma amounting to approximately 17,225 bbls. daily, compared with the demand in August. The feature of the week was the new interest in oil and gas leasing in Oklahoma County, where a recent sale of leases by the state school land board, resulted in the disposition of six 80-acre tracts for a consideration of $30,000.

Oklahoma's daily average crude oil production continues to show a decline, which is in keeping with the demand. The estimated daily production for the week ending September 3 was 382,850 bbls., a decline of 4,000 bbls. daily from the previous week.

The daily allowable production in Oklahoma was reduced 17,225 bbls. for the month of September, having been placed at 392,225 bbls. Since the first of the year the demand for crude oil from Oklahoma has declined approximately 54,298 bbls. daily, the majority of this decline having been in the Oklahoma City Field.

Comparative daily allowable production for the State, by districts for August and September follows:

District—	Bbls. Sept.	Bbls. Aug.
Class "A"	24,653	24,485
Seminole	125,238	131,350
Class "C"	15,707	15,740
Oklahoma City	75,720	87,350
Wildcats	300	350
Others	150,347	150,515
Total	392,465	409,690

Umpire Ray M. Collins, in explaining the decline in the demand, told the Corporation Commission that there is a general curtailment under way by refiners and that some of them continue to take crude oil from storage, rather than purchase it in the open market. Oklahoma City Field continues to suffer the largest portion of the decline due to the fact that but few of the purchasers have production in that field, while the majority of purchasers own production in the Greater Seminole Field and have had their connections there for the last five or six years.

Oil and Water

He stated that recent tests showed that the wells in the Greater Seminole area made 176 bbls. of water for each 100 bbls. of oil produced. To further curb these wells would be detrimental and a continuance of the 44 per cent of the potential was recommended.

The records show that 30 wells in the producing area of the Greater Seminole area have been plugged as exhausted since the first of the year and that since the discovery of the field in July, 1926, about 500 oil wells have been abandoned.

The next hearing on the allowable for the State will be held by the Corporation Commission September 28, at which time the demand will be estimated for the last quarter of the year.

School Land Leases

One of the important features of the week was the leasing of 400 acres of state school land for oil and gas purposes by the Carter Oil Co., Gypsy Oil Co., and the Sinclair Prairie Oil Co. from the State School Land Commission, in Section 36-13-4w, Oklahoma County, for a consideration of $30,000.

Action by the incorporated town of Nichols Hills to prevent the leasing of the acreage and to prevent the drilling of wells was contemplated at one time. The townsite asked for a week's delay before the bids on the oil and gas lease were accepted. The commission, however, acted immediately after a represnetative asked the commission to accept or reject the bids.

The commission rejected a bid on one 80-acre tract upon the theory that a higher bid might be received at a later date.

Members of the commission voting for the awards included Governor Murray; Frank C. Carter, state auditor; R. A. Sneed, secretary of state; and John Vaughn, state superintendent of public instruction. H. B. Cordell, president of the State Board of Agriculture, voted against leasing the land.

The lease on the 400 acres of land assures the three companies protection on the north of their block adjoining Oklahoma City on the northwest, on which a deep test may be drilled.

These same companies have unitized acreage in Section 12-12-4w, on which it is rumored a deep test may be started.

The lease on the 400 acres granted by the State School Land Commission includes all of the NE, SE and E half SW, Section 36-13-4w. The west one-half of the southwest quarter was bid at the same rate but was rejected.

A lease on the SE, Section 36-1s-10w, Cotton County, was sold to the Shasta Oil Co. for $4,500 with an agreement to drill a well within one year.

Fish Pool Allowable

Fish Pool operators, in a conference with the state proration umpire, Wednesday, failed to arrive at any agreement regarding the taking of new potentials in that district. The plan suggested on the taking of gauges to arrive at an allowable for each lease failed to meet with the approval of all the producers.

The allowed production of the Fish Pool, located south of Wewoka, in Seminole County, and along the boundary line of Hughes and Seminole Counties, is 2,500 bbls. The potential of the field on September 1 was 34,779 bbls., according to the report of State Umpire Ray M. Collins.

It was decided at the meeting that no change will be made for the month of September in the allowed output. Plans were under way to take a 12-hour gauge beginning at 7 a.m., September 1, in order to determine the September potential production.

Activity in Holdenville

The shallow sand area west of Holdenville in Hughes County continues to be active and several new locations are expected to be announced for the area. The Ramsey Petroleum Co. has entered into a contract with several other operators to drill 16 wells in Section 14-7-8, Hughes County, on acreage it owns, the wells to be drilled to the shallow pay horizon at 1,200 feet. The company retains a one-fourth overriding royalty. This acreage offsets the discovery well to the east.

A. Oliphant has agreed to drill four wells in the NW NW, Section 14-7-8. S. E. Galbreath has agreed to drill four wells in the SW NW, Section 14-7-8, and W. S. Key has agreed to drill eight wells in the E half NW, Section 14-7-8. Each of these operators has agreed to start one new well each 30 days until the entire drilling campaign is completed. A. Oliphant has started the first well in the SW cor. NW NW, Section 14-7-8.

Another producing well was added to the area during the week extending the pool a quarter of a mile to the northeast. The well is Limestone Oil & Gas Co. and others' No. 1 Holmes, SW cor., Section 11-7-8. It found oil at 1,167-95 feet, where it filled up 400 feet with oil in a short time. The same company's No. 1 Chupco, in Section 15-7-8, was underreaming at 1,140 feet expecting to reach the Calvin sand in a few more feet.

Greater Seminole Potential

Umpire Ray M. Collins, in an official report on the Greater Seminole district, placed the potential of the entire area at 319,145 bbls. daily, as of September.

Of this amount the Class "A" wells, in the area are given a potential of 3,823 bbls. daily; the Class "B" wells, a potential of 271,250 bbls. and the stripper wells are estimated at 4,260 bbls. daily. Included in the Fish Pool, is 39 bbls. of stripper production, and the Wewoka townsite with 15 bbls. stripper production and 5,087 bbls. total production.

The potential production as of September 1, in each of the pools, in the Greater Seminole district was as follows:

Pool, Class "B"—	Potentials bbls. per day
Allen	18,299
Asher-Wannette	9,522
Bowlegs	25,273
Carr City	20,216
Earlsboro (proper)	23,967
East Earlsboro	18,459
South Earlsboro	5,955
East Earlsboro Ext.	531
Earlsboro townsite	3,332
Konawa	10,951
Little River	39,694
Little River Ext.	3,050
Maud	2,589
Mission	15,624
Sasakwa	2,563
Searight	6,842
Seminole	33,231
East Seminole	2,405
West Seminole	12,134
St. Louis	34,651
Fish Pool—Class "C"	34,779
Wewoka townsite—Class "C"	5,087
Total	319,145

Assessment Doubled

Governor Murray ordered an increase in the assessment on oil produced in the Oklahoma City Field, to pay for the increased field forces to handle the military enforcement of proration in that field. The amount was raised from one-quarter of a cent to one-half a cent per barrel. The additional levy was necessitated by the employment of additional men in the field forces to handle the investigations and patrol shutdown properties.

The assessment was effective on the August production. Prior to the military enforcement in the Oklahoma City Field, a levy was fixed by the umpire on the amount of oil sold and transported from the field, the levy varying from less than a quarter of a cent per barrel, to around one-half cent per barrel. Under the present plan, all the operators with production in the field, must pay a share of the expense, while under the old plan only those operators subscribing to the plan paid the bills.

Meters Installed

Meters have been installed on all pipe line systems leading to pump stations and to refineries, and loading racks in the Oklahoma City Field, and effective September 1, all oil handled out of that field will be metered, according to Cicero I. Murray, in charge of military proration.

Installation of meters on pipe lines was ordered by Governor Murray, in an executive order last June, when the troops took over the enforcement of proration.

The meters will be checked regularly by members of the military enforcement division and these readings will be compared with the gauge tickets submitted by operators and pipe line companies.

The petition filed by H. F. Wilcox Oil & Gas Co. in regard to the flat allowables granted by the Oklahoma Corporation Commission in the proration schedule for the Oklahoma City Field, is set for hearing September 8. At the present time 25 bbls. is allocated to each producing well in the field even with the proration schedule and 100 bbls. a day is allocated to each well making 3 per cent or more water. This applies to all wells outside of the Siliceous lime zone.

Three refining and four producing companies, in the Oklahoma City Field, were named in a petition filed with the Oklahoma Corporation Commission, by Cicero I. Murray, in charge of military proration enforcement, alleging that a total of 1,002,000 bbls. of oil had been illegally handled during the first seven months of this year.

The petition was directed against the White Oak Refining Co., Capitol Producing & Refining Co. and John H. Peacock, independent refiner. Producing companies and operators were named only as a source of the crude alleged to have been handled by the refiners and were not named directly as parties to the complaint.

Colonel Murray said that the wells listed in the petition not already shut down would not be shut in until after the hearing is held. Hearing on the petition has been set for September 14, at which time a number of others and similar cases are to be heard. It is also alleged that the companies had failed to make correct reports to the umpire and to the military authorities on amounts of crude oil handled.

The White Oak Refining Co. is alleged to have handled approximately 650,000 bbls. of oil from the following 10 wells, in the Oklahoma City Field: R. A. McArthur's No. 1 Armourdale, No. 1 Kammerdiener and No. 1 Pruitt; Plains Petroleum Co.'s No. 1 Baum and No. 1 Sadler; Refiners Production Co.'s No. 1 Katy and No. 1 Buahanan; Gulf Production Corp.'s No. 1 Banner, and the Stauffer Petroleum Co.'s No. 1 Weinig.

John H. Peacock is charged with having run approximately 240,000 bbls. of oil since the first of the year, from three wells, formerly owned and operated by the C. C. Julian Oil & Royalties Co., No. 1 Hauser, No. 1 Shepard and No. 1 Walker.

Capital Producing & Refining Co. is alleged to have run 112,000 bbls. of oil from its own wells, No. 1 Refinery, No. 1 Hills and No. 1 Pruitt.

The petition says that in naming the quantities of oil alleged to have been over-run, exact figures are not given and the time in which the alleged over-run oil was handled is not given as a certainty.

During the week complaints were filed against Stauffer Petroluem Corp. alleging that the company produced a large quantity of oil prior to the shutting down of the company's No. 1 Weinig by the military. It is also alleged that the company failed to file correct reports of production with the umpire's department. The petition also states that a secret by-

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24 West 40th Street, New York City
1203 Tower Building, Chicago, Ill.
625 Hobart Building, San Francisco, Calif.
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pass was found on the flow line on the lease.

Hearing of the Stauffer Petroleum Corp. petition has been set for September 14.

During the week the militia shut down the Union Transportation Co.'s properties and broke connections to two wells, Col. Cicero I. Murray said. The company was requested to file its records and install a meter on its pipe line and was given five days in which to do so. The company was also asked to make reports to the military department on the amount of crude oil handled through its lines.

Phillips Petroleum Co.'s No. 1 Rock Island, Section 35-12-3w, in the extreme north end of the Oklahoma City Pool, made 49 bbls. of gasoline in 27 minutes with gas at the rate of 240,000,000 feet per day, from the Wilcox sand at 6,232-6,355 feet. It was shut in.

New Wells Completed

Huddleston, Inc.'s No. 1 Huddleston, NE cor. NW SE, Section 22-11-3w, in the southwest part of the Oklahoma City Field, flowed 703 bbls. of oil the first hour, with an estimated 67,000,000 feet of gas a day. The total depth of the well is 6,499 feet and the casing was cemented at 6,430 feet. It produced through a 4-inch choke.

Phillips Petroleum Co.'s No. 1 August, SW cor. NE, Section 3-11-3w, on a potential test, flowed 13,956 bbls. of oil in four hours, which is at the rate of 83,000 bbls. a day. The gas was estimated at 75,000,000 feet a day.

Same company's No. 1 Ingle, SE cor. SW NE, Section 3-11-3w, completed a few weeks ago, but which was shut in without testing, was opened and flowed 173 bbls. of oil in 14 minutes before the hole bridged. It was flowing through two 4-inch chokes. Gas was estimated at 16,000,000 feet a day. The total depth of the well is 6,407 feet, with 9-inch casing landed at 6,247 feet.

Anderson & Kerr and others' No. 1 Gallagher, SW cor. NW SE, Section 22-11-3w, flowed 3,034 bbls. in two hours through a 7-inch choke. The gas was estimated at 20,000,000 feet a day. Same operators' No. 1 Lippert, SW cor. NW SE, Section 22-11-3w, flowed 1,071 bbls. in one hour through a 7-inch choke, with the gas estimated at 13,000,000 feet a day.

A wildcat test, Sinclair Prairie Oil Co.'s No. 1 Kennedy, C SE NW, Section 4-13-1w, Oklahoma County, was drilling at 5,150 feet. It found a showing of gas at 4,550-60 feet.

Blaine County

Washoma Oil Co.'s No. 1 Phillips, C NW SW Section 13-19-10w, was abandoned at 5,115 feet.

Bryan County

C. A. Hahnee's No. 1 White, NW cor. NE NW Section 28-6s-8, was drilling at 1,380 feet.

Carter County

Schermerhorn-Ardmore Oil Co.'s No. 10 Wilson, C W half NE SE Section 23-4s-3w, was abandoned at 1,465 feet. Athey & Lively's No. 1 Pierce, NE cor. SE Section 18-2s-2w, was completed for 2,000,000 feet of gas from 2,048-60 feet. Noble and others' No. 1 Trahan, NE cor. SE NW Section 31-1s-2w, made 50 bbls. from 2,252-2,385 feet, total depth 2,413 feet.

Creek County

O. O. Owens' No. 1 fee, NW cor. Section 23-17-7, is a rig. Link Oil Co.'s No. 15 Mickey, NE cor. SE NW Section 33-18-7, made 5 bbls. from 1,360-1,416 feet. W. H. Atkinson's No. 1 King, SW cor. NE Section 31-16-7, was abandoned at 3,800 feet.

Cotton County

Donald Brothers' No. 1 Wilson, NW cor. SW NW NW Section 6-2s-9w, is a rig.

Hughes County

Dalet and others' No. 1 Davis, NE cor. NW NW Section 29-7-8, is a location. Southern Oil Co.'s No. 1 Adams, NW cor. SE SW Section 14-7-8, is a ma-

(Continued on Page 56)

Wildcat Operations in Oklahoma

Northern Oklahoma

ALFALFA COUNTY

Company, farm and location—	Remarks:
Smith Brothers' No. 1 Forbes, SE cor. NW NW Sec. 12-27-11w	S.D. 1,232 ft.
J. W. Bailey's No. 1 Acre, SW cor. NE Sec. 14-24-11w	S.D. 5,502 ft.

ATOKA COUNTY

Borton et al's No. 1 Miller, NE SW SW Sec. 28-1-14	Machine.
Winham et al's No. 1 Redwine, SE SW SW Sec. 23-1-14	S.D. 135 ft.
Willis et al's No. 1 Roland, NW NE SE Sec. 6-1-15	S.D. 1,000 ft.
Hicks et al's No. 1 Norris, NE NW SE Sec. 15-1-15	S.D. 375 ft.
Newman et al's No. 1 Bassett, C NW Sec. 18-1-15	S.D. 165 ft.

BECKHAM COUNTY

Pattel Royalty's No. 1 Goose Tree, SW SE SW SE Sec. 32-10-23w	Drlg. 475 ft.
Mid-Texas Co.'s No. 1 Sidell, NE cor. SW SW Sec. 17-22-22w	S.D. 3,550 ft.
White et al's No. 1 Green, SW cor. Sec. 34-10-24w	S.D. 3,575 ft.

BLAINE COUNTY

Watonga Petroleum Co.'s No. 1 Masters, SW NW NW, Sec. 27-16-11w	S.D. 375 ft.
Washoma Oil Co. et al's No. 1 Phillips, C NW SW Sec. 13-19-10w	S.D. 5,115 ft.

CADDO COUNTY

Abernathy & Brown's No. 2 Houston, Sec. 24-6-13w	S.D. 1,115 ft.

CHEROKEE COUNTY

La Piere et al's No. 1 Woods, C SE SE Sec. 27-17-21	S.D. 1,504 ft.

COAL COUNTY

Dodd & Burton's No. 1 Grigsby, NW SE NE, Sec. 35-1-8.	Location.
Funk & Russell's No. 1 Miller, SE NE Sec. 10-2-8	S.D. 2,500 ft.
Radial Oil Co.'s No. 1 McGraw, NE NW Sec. 2-1s-8	S.D. 1,450 ft.

COMANCHE COUNTY

G. W. Stogner's No. 1 Doebel, C SW SW Sec. 3-3-9w	S.D. 1,450 ft.

CREEK COUNTY

E. L. Jillson et al's No. 1 Starr, SE NW Sec. 13-15-8	Drlg. 2,350 ft.

CUSTER COUNTY

Miley Pet. Co.'s No. 1 Caldwell, NE Sec. 12-14-14w	Location.

ELLIS COUNTY

Algers Pet. Co.'s No. 1 Roper, C SE NW Sec. 21-20-24w	Spudding.

GRADY COUNTY

English Drlg. Co.'s No. 1 Heenan-Coe, NE SE NE, Sec. 32-3-7w	Show oil 3,255-87 ft.; to test.

GARFIELD COUNTY

E. L. Love et al's No. 1 White, SE cor. NW Sec. 9-24-6w	S.D. 5,850 ft.

GREER COUNTY

French's No. 1 Murphy, SW NW Sec. 23-7-21w	S.D. 1,645 ft.

HASKELL COUNTY

Ault et al's No. 1 Hall, NW SW SW Sec. 14-9-19	S.D. 2,000 ft.
Ault et al's No. 1 Hall, SE NW Sec. 25-19-9	S.D. 200 ft.

HUGHES COUNTY

Hudspeth et al's No. 1 Harron, NW NE Sec. 3-8-8	Rig on ground.

KAY COUNTY

Bluebaugh et al's No. 1 Indian, C NW NE Sec. 30-25-1	10,000,000 ft. gas 2,556-63 ft.; mudding off gas est. at 5,000,000 ft. recementing.
Lewis et al's No. 1 Harris, SE NW Sec. 14-25-1	Location.
Mummert Drlg. Co. et al's No. 1 Cormick, C NW SE Sec. 9-27-2	S.D. 3,693 ft.
Blackwell Oil Co.'s No. 1 Harshman, Sec. 2-26-1w	Rig on ground.

KIOWA COUNTY

McWhirter Bros.' No. 1 Kline, SE NW, Sec. 5-6-16w	Drlg. 800 ft.
Christian's No. 1 Jones, NE SE Sec. 8-7-18w	Drlg. 1,466 ft.

LATIMER COUNTY

P. English's No. 1 Unknown, NW SE Sec. 16-6-19	S.D. 1,542 ft.

LINCOLN COUNTY

Sovereign Oil Co.'s No. 1 Flowers, SW SE SE Sec. 14-12-3.	Rig.

NOBLE COUNTY

Wentz Oil's No. 1 Wolff, C SE NW Sec. 17-20-2w	Drlg. 4,525 ft.

OKLAHOMA COUNTY

Sinclair Prairie's No. 1 Kennedy, C SE NW Sec. 4-13-1w	Drlg. 4,165 ft.
Citizens Oil Co.'s No. 1 Sage Barber, NE cor. Sec. 21-11-3w	S.D. 1,200 ft.
L. C. Hivick's No. 1 Sunset Addition, NW SW NW Sec. 17-11-3w	S.D. 5,515 ft.

OSAGE COUNTY

Mohawk Oil Co.'s No. 1, NE cor. Sec. 10-26-9	1,575-1,633 ft.; shot 120 qts. oil exhausted; S.D.

PAWNEE COUNTY

Rookstool's No. 1 Wylie, NW NE SW Sec. 6-20-5	S.D. 1,950 ft.

PITTSBURG COUNTY

Tate Oil Co.'s No. 1 Fulton, SE cor. Sec. 34-7-14	T.D. 2,975 ft; abd.
Nelson & Flynn's No. 1 Anderson, NE SW Sec. 12-7-13	Drlg. 2,700 ft.
J. Morrison's No. 1 Fowler, NE SE Sec. 13-7-17	Rig.
C. Kennedy's No. 1 Travis, C SW NE Sec. 15-7-14	Rig.
Moffett & Hall's No. 1 Jones, NW cor. Sec. 14-8-14	Fishing tools 1,620 ft.

PONTOTOC COUNTY

Blackwell Oil & Gas Co.'s No. 1 Abbott, NW SW NE Sec. 14-4-6	Rig.
Williams' No. 1 Krath, NW SE Sec. 33-3-4	Drlg. 145 ft.
Edna Marie's No. 1 McWhirt, NE SE Sec. 11-2-6	S.D. 570 ft.
Sunray Oil's No. 1 Grant, SE NE Sec. 11-4-8	Drlg. 1,570 ft.

POTTAWATOMIE COUNTY

Brown et al's No. 1 Sauter, NW cor. Sec. 35-11-4	Digging cellar.

ROGER MILLS COUNTY

Ute Oil Co.'s No. 1 Williams, C SW Sec. 23-12-24w	S.D. 5,150 ft.
L. C. Hivick's No. 1 Davis, C NW NE Sec. 4-11-26w	S.D. 3,430 ft.

SEMINOLE COUNTY

Donnelly et al's No. 1 Shepard, SE NE Sec. 4-8-8	Drlg. 1,020 ft.

WASHITA COUNTY

Miley Pet. Co.'s No. 1 Montgomery, SW NW SE NW Sec. 23-9-17w	Drlg. 705 ft.
Miley Pet. Co.'s No. 1 Wolfe, NE SW Sec. 23-9-17w	Rig.
Cooper & Terhune's No. 1 Blocker, NW cor. Sec. 29-8-19w	Show oil 2,459-67 ft.; S.D. 2,757 ft
Burns & Prince's No. 1 Deck, SW cor. Sec. 21-8-18	S.D. 2,160 ft.

Oklahoma Panhandle

TEXAS COUNTY

Three Way Oil Co.'s No. 1 Crane, SW NW Sec. 11-1-1E	T.D. 4,720 ft.; to cement.

Southern Oklahoma

ATOKA COUNTY

E. B. Croxton's No. 2 Moore, NW cor. Sec. 2-1s-14	Abd. 265 ft.
E. B. Croxton's No. 3 Moore, CWL NW NW Sec. 2-1s-14.	Location.
McClure et al's No. 1 Little John, NE NW SE	S.D. 200 ft.
Morris et al's No. 1 Ray, NE NW NE Sec. 8-2s-12	S.D. 610 ft.
Brookshire's No. 1 R. W. Rowland, NW NE SE Sec. 13-3s-10	Drlg. 2,670 ft.

BRYAN COUNTY

Hughes' No. 1 Ayres, NE SW Sec. 30-7s-7	Fishing 850 ft.

CARTER COUNTY

Russell's No. 1 Ratliff, NW NE NW SW Sec. 19-1s-2w	Drlg. 1,770-90 ft.; showing 30 bbls oil.

JEFFERSON COUNTY

Shasta Oil Co.'s No. 1 Bollinger, SW NE SW, Sec. 26-4s-6w	Drlg. 1,200 ft.
E. S. Bonner's No. 1 Burgess, NE SE Sec. 12-5s-8w	S.D. 750 ft.

MARSHALL COUNTY

Thomas' No. 1 Setliff, SW SE SE SW Sec. 36-5s-6	Drlg. 180 ft.
J. T. Hogan's No. 1 Thompson, NE NW NE Sec. 24-7s-4	Location abd.

McCURTAIN COUNTY

Prassell et al's No. 1 Wagoner, SE NE Sec. 5-8s-27	S.O. 560 ft; T.D. 1,040 ft; abd.
Stampfs' No. 1 Robert Harris, SW NW NW Sec. 14-8s-25	S.D. 2,775 ft.

PUSHMATAHA COUNTY

Whitehead et al's No. 1 Messer, SE SW SW Sec. 35-3s-13	S.D. 1,950 ft.

STEPHENS COUNTY

Gillette Bros.' No. 1 Cooley, NW SE NW Sec. 17-2s-5w	Rig.
George's No. 1 Ryan, NW SW NE Sec. 31-2-15	S.D. 510 ft.

New Pool Looms in Cowley County, Kansas, and Voshell Pool Is Extended Southerly

By W. A. SPINNEY
Staff Correspondent, Kansas Fields

One of the outstanding events of the week in Kansas was the promise of a new pool, about 2 miles northeast of Winfield townsite in Cowley County. A showing of oil was found in a well drilling there in Siliceous lime. A newly completed well in the north end of the Voshell Pool, in McPherson County, made 1,000 bbls. on a potential test. It extended the producing area one location to the west. The important wildcat well of Skelly Oil Co. in Kingman County was still being plugged back in an attempt to shut off bottom-hole water found in the Siliceous lime. It is believed it will be several days before a production test can be made of the oil showing in the well.

The State's daily average production shows an increase for the week ending September 3 of 1,000 bbls. daily. The daily average for the seven days is estimated at 96,200 bbls.

Hopes for a new pool about 2 miles northeast of the Winfield townsite were promising when a showing of oil was found in the Siliceous lime in W. M. McKnab and others' No. 1 Southwestern College, NW cor. SE Section 11-32-4, Cowley County. The Siliceous lime was found at 3,418 feet, where oil rose 200 feet in the hole. It will be drilled deeper and a production test made of the oil showing.

Gypsy Oil Co.'s No. 2 Stucky, NE cor. Section 33-20-3w, in the north extension to the Voshell Pool, in McPherson County, is rated at 1,000 bbls. a day. On a swabbing test the well produced 42 bbls. of oil an hour. The oil was found in the Simpson sand at 3,448-59 feet. The test has been put to pumping. Three offsets are forced by the completion of this well as a commercial producer. Companies owning the offsets are Sinclair Prairie Oil Co., one, and Slick, Pryor & Lockhart, two.

South Extension to Voshell

Considerable interest is being shown in the L. A. Mylius and others' No. 1 Ediger, SE cor. SW Section 16-21-3w, in the south extension of the Voshell Pool, in McPherson County, where a showing of oil was found in the Simpson sand at 3,367-88 feet. The Wilcox sand was found from 3,413-22 feet, where the well swabbed 15 bbls. an hour. The well extends the Wilcox sand production one-half mile south.

In an effort to increase production of the United Petroleum Co. and others' No. 1 B. Smith, NW cor. NE NW Section 29-19-1w, on the east edge of the Ritz-Canton Field, in McPherson County, the well was given a 40-quart shot in the Viola lime at 3,417-29 feet. It had been swabbing 30 bbls. of oil an hour. The well is a south offset to the Darby Petroleum Corp.'s No. 2 Coons, which is a 1,200-bbl. producer.

Alva Billings and others' No. 1 Mermis, NW cor. NE Section 9-14-15w, Russell County, in the Gorham Pool, was spudding. The same operators' No. 1 Witt, NW cor. SW SE Section 4-14-15w, in the Gorham Pool, pumped 115 bbls. of oil in 11 hours from the sand at 3,037-42 feet. The storage tanks are practically full on this lease and the well will be shut in awaiting a pipe line outlet.

In the Burrton district the Sinclair Prairie Oil Co.'s No. 1 Regier, C NE SE Section 24-23-4w, Reno County, was drilling out the cement plug and was expecting to test the chat formation.

Olsen Oil Co.'s No. 1 Nelson, C NW NW Section 30-23-3w, on the western edge of Harvey County, was preparing to drill into the chat; total depth was 3,150 feet.

The same company's No. 1 Johnson, C SW NW Section 24-23-4w, has not been rigged up since the derrick blew down and it was only recently rebuilt. It was drilled to 3,347 feet a few weeks ago and shut down. It was estimated to be making about 25 bbls. of oil an hour and 7,000,000 feet of gas a day.

Barnsdall Oil Co.'s No. 1 Baughman, in Section 32-23-4w, flowed 8 bbls. of oil an hour from the chat at 3,352 feet. The production declined to about 5 bbls. of oil and 5 bbls. of water an hour and the company is drilling the well deeper at 3,398 feet. It is located about a half mile from the nearest production in the area.

Development in the Hollow Pool, in Harvey County, continues active and the drilling is resembling a town-lot play on account of the close spacing of the wells, due to a number of small tracts, some less than an acre in size. There are five producing wells in the pool, all grouped around the discovery well, which was drilled on a 1-acre tract in the SW cor. NW Section 20-22-3w.

The development consists of Frank Hollow's No. 1 School Land, NE cor. SE Section 19-22-3w, which was drilling at 2,800 feet; W. C. McBride, Inc.'s No. 2 B. Friesen, NW cor. SW Section 20-22-3w, drilling 800 feet; E. L. Study and others' No. 1, NE cor. SE Section 19-22-3w, drilling around 2,000 feet, and Producers & Refiners Corp.'s No. 1 Martens, NE cor. NW SE Section 19-22-3w, which was a rig.

Wildcat Operations in Kansas

(Descriptions are East unless marked otherwise)

Company, farm and location—	Remarks:
BARTON COUNTY	
Doherty et al's No. 1 Roesler, SW NE, Sec. 11-18-11w	Drlg. 620 ft.
Smith et al's No. 1 Wilson, C NW SW Sec. 13-18-14w	Drlg. 700 ft.
Skelton Oil Co.'s No. 1 Ott, C SE SE Sec. 16-19-14w	Set liner 3,530-46 ft.; show oil; C.O. 3,604 ft.
BUTLER COUNTY	
Cameron-Great Basin Oil Co.'s No. 1 Lardson, C SE NW Sec. 13-28-2	Fishing 2,520 ft.
Ramsey's No. 1 Michael, SW NW NW Sec. 18-27-3	S.D. 1,985 ft.
Colby et al's No. 1 Featherson, C SE Sec. 27-14-18	Drlg. 650 ft.
DOUGLASS COUNTY	
Pure Oil Co.'s No. 1 Limb, NW SE Sec. 31-14-19	Drlg. 1,050 ft.
EDWARDS COUNTY	
Mid-Kansas O. & G. Co.'s No. 1 Converse, SW NE NE Sec. 30-24-18w	Drlg. 4,552 ft.
ELLSWORTH COUNTY	
Viking Oil Co.'s No. 1 Satran, C NW SW Sec. 5-14-9w	Spudding.
Gurley Bros. and Barnsdall's No. 1 Union Pacific, NW SW Sec. 7-14-7w	Rig.
Phillips Pet. Co.'s No. 1 Hochman, NE NW SE Section 17-16-7w	Rig.
Morgan's No. 1 Andrews, NE SW Sec. 3-17-8w	Spudded; S.D.
Walker et al's No. 1 Remley, SW SE NE Sec. 23-14-7w	S.D. 2,690 ft.
Slick et al's No. 1 Dreford, SW NW Sec. 7-17-10w	Oil 3,371-98 ft.
R. Gear et al's No. 1 Kroboth, SE NW Sec. 12-15-10w	S.D. 50 ft.
R. Gear et al's No. 1 Sanberth, C SW SE Sec. 29-16-9w	Drlg. 2,815 ft.
FRANKLIN COUNTY	
Smith et al's No. 1 Malcher, C SW SW Sec. 35-15-19	T.D. 1,040 ft; abd.
FINNEY COUNTY	
Joe Denham et al's No. 1 Brown, S SW Sec. 16-25-34w	Rig.
National Ref. Co.'s No. 1 Wells, C SW Sec. 13-23-30w	Drlg. 5,740 ft.
FORD COUNTY	
Swain et al's No. 1 Henthorn, C NW Sec. 21-25-24w	Drlg. 5,210 ft.
GRAHAM COUNTY	
Schleimeyer et al's No. 1 Smith, SE Sec. 24-8-25w	Rig.
HARVEY COUNTY	
Liggett et al's No. 1 Davis, SW SE NE Sec. 7-24-1	Drlg. 3,257 ft.
Herndon, Blair, Deep Rock, No. 1 Santa Fe, C NW Sec. 19-23-1	Drlg. 1,445 ft.
HASKELL COUNTY	
Victor Martin et al's No. 1 Weeks, C NW Sec. 8-28-31w	Rig.
KINGMAN COUNTY	
Panhandle Drlg. Co.'s No. 1 Wetheral, C SE NW SW, Sec. 20-28-10w	Set 12-in. csg. 1,610 ft.; S.D.
LEAVENWORTH COUNTY	
West et al's No. 1 Karb, C NW NE Sec. 32-10-21	Drlg. 680 ft.
McPHERSON COUNTY	
Darby Pet. Co.'s No. 1 Pankratz, NW SE Sec. 5-20-1	Rig.
Snyder et al's No. 1 Carlson, SE cor. Sec. 4-19-3w	S.D. 1,525 ft.
Detrick's No. 1 Dalke, NW SE Sec. 16-19-1	Drlg. 2,450 ft.
Sidwell et al's No. 1 Nichols, NE NW NW Sec. 28-17-1n	S.D. 1,205 ft.
MORTON COUNTY	
Hydraulic Oil Co.'s No. 1 State Land, NW SE Sec. 22, 34-43w	T.D. 3,640 ft.; temp. abd.
MORRIS COUNTY	
Urschel et al's No. 1 Bersuch, NW SE NW Sec. 10-17-7	S.D. 915 ft.
NORTON COUNTY	
Richards et al's No. 1 Colby, Sec. 17-4-21w	Rig.
OSAGE COUNTY	
Briggs & Smith's No. 1 Wood, SE NW Sec. 21-14-15	S.O. 2,190-2,200 ft.; temp. abnd
PRATT COUNTY	
Ninnescah O. & G. Co.'s No. 1 Hardesty, SW SE SE Sec. 28-27-11w	Drlg. 2,160 ft.
RENO COUNTY	
National Union's No. 1 Hill, NE SE Sec. 18-24-4w	Location.
Martin et al's No. 1 Yadu, C NW NW Sec. 15-24-5w	S.D. 318 ft.
RICE COUNTY	
Langston et al's No. 1 Wells, NE SE Sec. 4-20-9w	Rig.
J. Liggett et al's No. 1 Thodel, C NW NW Sec. 11-21-7w	S.D. 50 ft.
RUSH COUNTY	
Barnsdall's No. 1 Schultz, SW cor. Sec. 3-19-16w	Drlg. 1,130 ft.
Skelton et al's No. 1 Brock-Hartman, SW SE NE Sec. 4-18-16w	S.D. 50 ft.
SALINE COUNTY	
Twin Mounds Oil Co.'s No. 1 Wels, C W½ NE NW Sec. 20-13-4w	S.D. 3,511 ft.
SEDGWICK COUNTY	
Scroggins et al's No. 1 Bartlett, NW SE NW Sec. 35-27-1	Drlg. 1,320 ft.
SHERIDAN COUNTY	
Flo et al's No. 1 Shoemaker, SE SW Sec. 27-7-26w	H.F.W. 4,535-45 ft.; S.D.
STEVENS COUNTY	
Argus Prod.'s No. 2 Christopher, C NE Sec. 10-33-39w	S.D. 5,521 ft.;
SUMNER COUNTY	
Austin et al's No. 1 Fog, SW SE SE Sec. 14-34-1w	Drlg. 1,980 ft.
Trees Oil Co.'s No. 1 Tompkins, SW Sec. 26-33-1	Location.
Trees Oil Co. and Shell's No. 1 Springate, NE SE SW Sec. 6-34-2	S.D. 3,639 ft.

Separate Common Sources

The Kansas Public Service Commission has sent out notices that the Derby Oil Co. of Wichita has formally requested that the chat production in the south extension of the Voshell Pool, McPherson County, be considered and declared to be a separate common source of supply from the deeper formations in the main pool for the purpose of operation and pipe line nominations.

A similar division has been made of the chat and the Viola production in the Ritz-Canton Pool, in McPherson County, for the purpose of operation and pipe line nominations, because it was decided it is a separate common source of supply. It is believed the request will be granted unless opposition presents good and sufficient testimony to the contrary.

The majority of the producing wells in the main part of the Voshell Pool are producing from the Simpson sand, which is deeper than the chat. The production from the chat in the south extension area of the Voshell Pool was only recently discovered.

Another Complaint

G. P. Dickey filed a complaint with the Kansas Public Service Commission, claiming that a shortage of over 89,000 bbls. has developed on his Decker lease in Section 35-19-2w, in the Ritz-Canton Pool, and requests an order allowing this adjustment.

This shortage is alleged to have been caused by the operation of wells on this lease, under orders of the commission, based on the allowable pipe line outlet, which was below ratable taking when percentage on the Decker lease was considered, against offset wells having fixed minimum allowables.

As this situation may affect other wells in the pool, producing from the chat formation, on which no complaint has been made or received, all operators with chat production in the pool are urged to attend the meeting and present evidence relative to the case and on their own wells.

New Viola Lime Well

Carter Oil Co.'s No. 1 Tinsley, NW cor. SE Section 6-20-1w, in the south end of the Ritz-Canton Pool, is a new Viola lime well swabbing at the rate of 20 bbls. an hour. The formation was shot in an effort to increase the production. The Viola lime was found from 3,415-25 feet.

Cowley Overproducing

A meeting of operators was held Monday at Winfield to consider placing all new wells that are completed on the townsite under proration. The Winfield operators met with the officials of the Kanotex Refining Co., which has been purchasing most of the oil produced at Winfield. Marvin Lee, chairman of the state oil advisory board, presided at the conference.

All the wells in the Winfield district have been producing 100 per cent of their production. One-half of the oil has been going into storage, while the producers have been receiving payment for the other half.

The officials of the Kanotex Refining Co. expressed the preference that the production be reduced one-half and the company would then pay for all it runs.

The Kanotex Refining Co. has been running around 3,000 bbls. daily from the Winfield townsite area, and purchas-

ing one-half of this amount, storing the other half.

A committee was to be appointed to work out the details of proration for the pool. The Kanotex Refining Co. has requested all operators with production in the areas to produce their wells through 2-inch tubing.

New wells are expected to be completed on the Winfield townsite in a few days. McCole and others' No. 1 Helper, in the southern part of the townsite, found what was estimated to be 100,000 feet of gas a day in the Bartlesville sand at 2,990 feet and was drilling deeper.

Hinkle and others' No. 1 Banks is shut down waiting for repairs to the electric motor. A showing of oil was found in the Siliceous lime earlier in the week.

The W. M. McKnab and others' No. 1 Southwestern, in Section 11-32-4, about 2 miles northeast of Winfield, was preparing to test the oil showing found in the Siliceous lime.

Barton County

Terry and others' No. 1 Berscheidt, NW cor. SE SE Section 12-20-11w, is a rig.

Cowley County

Deal Oil & Gas Co.'s No. 1 Covalt, NW cor. SW SW SE Section 22-32-4, is a rig. Roth & Farout's No. 5 Southwestern College, SW cor. NE SE Section 22-32-4, is a rig. Deal Oil & Gas Co.'s No. 1 St. Johns College, NW cor. NE Section 27-32-4, made 200 bbls. from 2,352-81 feet. Shawver and others' No. 1 Snyder, SE cor. SW NW NE Section 27-32-4, was completed for 83 bbls. from 2,365-80 feet.

Greenwood County

Frazier and others' No. 1 Smith, NE cor. NW SW Section 8-24-12, is a machine. Landon and others' No. 2 Smith, CEL SW NW Section 8-24-12, made 250 bbls. from 1,725-38 feet, after a 60-qart shot. Same operators' No. 3 Smith, SW cor. NW NW Section 8-24-12, made 300 bbls. at 1,724-44 feet.

McPherson County

Stanolind Oil & Gas Co. and others' No. 3 Zarger, SW cor. NE SE Section 16-21-3w, is a location. Spencer and others' No. 1 Neufeldt, NW cor. SE SE Section 16-20-3w, is a location. Slick, Pryor & Lockhart's No. 2 Stucky, SW cor. Section 27-20-3w, is a rig. Sinclair Prairie Oil Co.'s No. 1 Stucky, SE cor. Section 28-20-3w, is a rig. Same operators' No. 3 Gratton, NW cor. Section 34-20-3w, is a rig. Wolf Creek Oil Co.'s No. 3 Krehbiel, NW cor. Section 25-19-2w, is a rig. Derby Oil Co. and others' No. 1 Sellers, SW cor. NW Section 19-19-1w, old well drilled deeper, was abandoned at 3,511-22 feet after finding water. Derby Oil Co. and Sinclair Prairie Oil Co.'s No. 3 Lacquement, C SW SE Section 20-19-1w, is a location. Vernon Oil & Gas Co. and others' No. 1 Schmidt, C SW NW Section 35-19-1w, is a location. Shell Petroleum Co.'s No. 4 Johnson, NE cor. NW Section 2-20-3w, made 515 bbls. of oil from 2,962-3,039 feet. Gypsy Oil Co.'s No. 2 Stucky, NE cor. Section 33-20-3w, made 1,025 bbls. from 3,448-59 feet. Helmerich & Payne's No. 1 Johnson, C SW NE Section 13-19-2w, made 68 bbls. an hour from 3,400-00 feet.

Rice County

Shell Petroleum Corp.'s No. 1 Murphy, C NW NE Section 4-19-9w, was abandoned at 3,269-3,331 feet after finding water.

Trego County

Central Commercial Oil Co.'s No. 2 King, SE cor. SW NE Section 20-13-21w, is a rig.

OFFERS LOW PRESSURE DIESEL

NEW YORK, Sept. 3.—Capt. Frederick A. Pippig, war time member of Von Richthofen's "Flying Circus" and now a consulting engineer with offices at 607 West Forty-third Street, here, conducted a private showing of a new semi-Diesel engine, involving a new principle of ionization of the fuel air mixture through the use of ultra-short waves, at his offices here this week.

More Good Wells Reported and Busy Fall Season Predicted in Michigan

By GEORGE A. WHITNEY

MOUNT PLEASANT, Mich., Sept. 2. Indications are that the fall will be a very active season in the Central Michigan Field, where numerous locations are staked out and will be drilled as rapidly as the drilling outfits can do the work. Two excellent oil wells were brought in by the Pure Oil Co. This company's No. 5-B well, 330 feet from the south line and 990 feet from the east line of the A. Bernard farm, SE SE, Section 9, Greendale Township, Midland County, which produced at the rate of 100 bbls., from the Traverse formation, has been drilled into the Dundee sand and produced according to reports 1,100 bbls., initially. The Pure Oil Co.'s No. 3 well, in the northeast corner of the W. A. Cassidy farm, in the E half NW, Section 16, same township, is reported with an initial of 1,325 bbls. from the Dundee formation.

The Pure Oil Co., according to late reports, has decided to abandon its test in the northeast corner of the William T. Yeo farm, NE NE, Section 2, Horton Township, Ogemaw County, which had a showing of oil in the Monroe formation at 3,600 feet, but was drilled close to 5,000 feet and through the Dundee formation. Considerable valuable geological information in the Ogemaw area was obtained by drilling the well and it will serve as a key to any future tests which may be drilled in that area. The Pure Oil Co. holds a large leased acreage in that vicinity and it has not been announced whether or not this company will further explore the area by drilling further tests.

The Pure Oil Co. drilled deeper its old No. 1 Fox, Section 13, Chippewa Township, Isabella County, from the Traverse formation to the Dundee formation, where the well is reported good for 75 bbls. initially.

Near Completions

Seven drilling wells in the East Pool, in Greendale Township, Midland County, are due for completion in a very few days. The Pure Oil Co. has three wells close to the Dundee sand. They are No. 3 well, 990 feet from the north and east lines of the George Purtell farm, NW SE NW, Section 15, drilling around 3,000 feet; No. 4 George Purtell, SE NE SE, same section, drilling around 2,700 feet, and No. 5 Mullett, 990 feet from the north line and 330 feet from the west line of the farm, SW NW NE, Section 15, drilling around 1,700 feet; No. 1 well in the southwest corner of the A. Seeley farm, SW SE, Section 9, drilling around 3,250 feet, and No. 1 well in the northeast corner of the Bemis-Bond farm, NE NE NW, Section 15, drilling around 1,600 feet.

W. L. McClanhan, Inc., is drilling around 1,600 feet in a test on the Mack Spearbrocker farm, SW SW NW, Section 13, Greendale Township, Midland County.

Gordon Oil Co.'s No. 5-B well, in the northeast corner of the N. J. Skinner farm, NW NE NE, Section 16, Greendale Township, is drilling around 3,450 feet and just on top of the Dundee formation. Wellman Oil Co.'s No. 2 well, 360 feet from the south line and 990 feet from the west line of the John Bolen farm, SE SE NE, Section 14, same township, is drilling around 3,300 feet. Old Dutch Refining Co.'s No. 1 well, in the northwest corner of the John Opperman farm, SW SW SE, Section 12, same township, is on top of the Dundee at 3,400 feet.

Braden-Sanders Co.'s No. 3 well, 990 feet from the south line and 330 feet from the west line of the Kate Stapleton farm, in the NW SW SE, Section 13, same township, is drilling close to a depth of 3,300 feet; Talbot Oil Co.'s No. 3-C, state land, in the NE SE SE, Section 10, drilling around 2,100 feet; Columbia Oil & Gas Co.'s No. 2 well, 990 feet from the south and west lines of the M. F. McLaughlin farm, NE SW NW, Section 15, drilling around 1,650 feet.

R. D. Malcolm's No. 1 well, in the northwest corner of the Malcolm-Nickerson farm, NW NW NW, Section 13, same township, is drilling around 1,600 feet; Columbia Oil & Gas Co.'s No. 4, in the southeast corner of the George Hornick farm, SE NW NW, Section 15, drilling around 1,400 feet; W. A. Robison's No. 2, in the southeast corner of the N. J. Skinner farm, SE SE SW, Section 9, same township, down around 2,000 feet; Stewart & Co.'s No. 2 John Opperman, SE NE SE, Section 12, down around 1,700 feet.

Isabella County

Homer C. Leonard, trustee, is reported drilling around 2,200 feet in a test on the Leon G. Slentz farm, NW NW SE, Section 22, Denver Township, Isabella County. John C. Arthurs, Inc., is drilling close to 1,000 feet in No. 3 on the J. and C. Schug farm, E half S half SW, Section 22, same township.

George C. Hanner's test in the northeast corner of the Henry A. Welch farm, NE NW NE, Section 25, Isabella Township, drilling close around 2,200 feet. W. L. McClanahan, Inc., is drilling around 2,000 feet in a test 330 feet from the north line and 990 feet from the west line of the John Pollard farm, Section 1, same township.

In Denver Township, the Apache Oil Co. is shut down at 1,500 feet in a test on the Epple farm, SE SE NE, Section 30, and Leon A. Thompson is shut down at 390 feet in a test on the John Venercook farm, SE NE SE, Section 24, same township.

In Vernon Township, same county, Thomas E. Currie and others' test on the Mackenzie farm, in the C SE SE, Section 34, is drilling close to 1,000 feet.

Clare County

The Theodore Oil Co. is drilling around 1,600 feet at a test on the Thompson Brothers farm, in the SE SW NE, Section 35, Greenwood Township, Clare County.

Among the Wildcats

Gratiot County is to be tested more thoroughly for both oil and gas, and along Pine River by Alma and Detroit interests. A drilling rig is being erected on the H. L. Laycock farm 1¼ miles southeast of the town of Alma, and this development is taken as the forerunner of wildcatting in the neighboring county far to the south of Mount Pleasant Field. James G. Tiplady, representing Detroit interests, is in charge of operations. The first well in this territory was drilled about two years ago, west of Alma on the Nelson farm. A showing of oil was found but not in commercial quantity.

The test being made by Thomas E. Currie and others on the Ruth Cowden MacKenzie farm, C SE SE, Section 34, Vernon Township, Isabella County, and approximately 8 miles north of Mount Pleasant, is attracting much interest. This well is reported getting close to the Marshall formation which is the gas-producing formation in that part of Michigan.

In Oceana County, L. E. DuVall is drilling a test 962 feet from the south line and 1,020 feet from the west line of the Margaret Wallace, NE SW SW, Section 32, Elbridge Township.

Drilling Permits

Permit No. 1,348, issued to the Michigan Oil & Gas Corp. for No. 2 well, 330 feet from the south line and 990 feet from the west line of the Iva Bond farm, SE SW NE, Section 12, Greendale Township, Midland County.

Permit No. 1,349, issued to the Pure Oil Co., for No. 1 well, 2,310 feet from the south line and 330 feet from the east line of the Mattie Yost and others, in the S half W half, Section 35, Greendale Township, Midland County.

Permit No. 1,350, issued to the Pure Oil Co. for No. 1 "A" well, 330 feet from the north and east lines of the Claud and Gladys Harnick farm, being the north 60 acres, in the E half NE, Section 14, Greendale Township, Midland County.

Permit No. 1,351, issued to the Pure Oil Co. for No. 6 well, 1,650 feet from the north and 330 feet from the east line of the George A. Purtell farm, N half E half, NW, Section 15, Greendale Township, Midland County.

Permit No. 1,352, issued to the Pure Oil Co. for No. 6 well, 1,650 feet from the north and 1,650 feet from the east line of the Charles Mullet farm, N half NE and SW NE, Section 15, Greendale Township, Midland County.

Permit No. 1,353, issued to the Pure Oil Co. for No. 3 well, 2,310 feet from the north and east lines of the George Lilly farm, in the S half NE, Section 18, Greendale Township, Midland County.

Permit No. 1,354, issued to the Pure Oil Co. for No. 2 well, 990 feet from the north line and 330 feet from the east line of the Nathan Kidder farm, N half NE. Section 17, Greendale Township, Midland County.

Permit No. 1,355, issued to the Pure Oil Co. for No. 3 well, 330 feet from the south line and 990 feet from the east line of the E. O. Harris and others' farm, in the S half SE NW. Section 15, Greendale Township, Midland County.

Permit No. 1,356, issued to L. E. DeVal for No. 1 well, 962 feet from the south line and 1,020 feet from the west line of the Margaret Wallace farm, in the NE SW SW, Section 32, Elbridge Township, Oceana County. Margaret Wallace is administratrix of the J. C. Wallace estate.

Permit No. 1,357, issued to the Talbot Oil Co. for No. 2 well, 330 feet from the south and east lines of the state land in the SW SE SE, Section 11, Greendale Township, Midland County.

Permit No. 1,358, issued to the G-Le-P. Oil Development Co. for No. 2 well, 2,310 feet from the south line and 990 feet from the west line of the William Schaffer farm, SE SW SW, Section 12, Greendale Township, Midland County.

Permit No. 1,359, issued to H. H. Brown, for No. 1 well on the Louis E. Bower farm, SW SE SE, Section 20, Chesterfield Township, Macomb County, the well location to be 225 feet from the northeast line; 1,500 feet from the southeast line; 500 feet from the southwest line and 600 feet from the northwest line of the property.

VENEZUELA PRODUCTION

Production of Colon Oil Corp.'s subsidiary in Venezuela for the week ended August 27 was 122,234 bbls.

LEGAL

Sale of Oil and Gas Leases, Department of the Interior. Notice is hereby given that 1,913.99 acres in the producing Hugoton gas field in Ts. 31 and 32, R. 38; Ts. 32 and 35, R. 39; Ts. 32 and 33, R. 40; all south and west of the 6th P.M., Kansas, Stevens and Morton Counties, and in T. 4, Ra. 14 and 15; Ts. 3, 4 and 6, R. 16, all north and east of C.M., Oklahoma, Texas County, are offered to the qualified bidder of the highest amount offered per acre as a bonus for the privilege of leasing the land under Section 17 of the act of February 25, 1920 (41 Stat. 437), in the court house in Hugoton, Kansas, at 10 a.m. o'clock on October 4, 1932. Full particulars governing the sale and the conditions upon which the leases will be issued may be secured from John T. Murphy, Chief of Field Division, Santa Fe, New Mexico. Written bids may be submitted addressed to Mr. Murphy and must be mailed so as to reach Santa Fe not later than 3:30 p.m., October 4, 1932 (two days before sale) and should be marked on the outside of the envelope "Bids on Gas Lands." Any written bid so received will be given consideration and the highest such bid for any tract be announced at the time of sale as the first bid. Should no higher oral bid be received, a tract may be awarded to the maker of the highest written bid. Bidders are warned against violations of the provisions of Section 59 of the U. S. Criminal Code, approved March 4, 1909, prohibiting unlawful combination or intimidation of bidders. The right is reserved to reject any and all bids in the discretion of the Secretary of the Interior. Jos. M. Dixon, Acting Secretary of the Interior.

Seek Plan to Unitize Hobbs Field That Will Be Agreeable to All Interested Operators

By TOLBERT R. INGRAM
Staff Correspondent, Rocky Mountain Area

DENVER, Colo., Sept. 5.—Operations in the Rocky Mountain area developed little important news during the week. In the Hobbs Pool in New Mexico, the Midwest Refining Co.'s No. 11 Terry was completed and is waiting to be tested. The Skelly Oil Co. made a location in the northern part of the pool. The Tidal Oil Co.'s test in the Eunice area has had several good shows and is preparing to drill in.

In Colorado, The Texas Company completed a 30-bbl. well at Tow Creek and the Ohio Oil Co.'s No. 1 Butters, in the Greasewood area, had 3,500 feet of oil in the hole when the tools were run to clean out.

The Midway Dome test of the Mutual Syndicate in Wyoming reached the Muddy and the core showed saturation. Casing is being run to test. Three new operations were reported in the Osage Field. The Bales Oil Trust's No. 1 Brome, on the Hidden Dome, may be a small producer.

Four locations in the Cut Bank Field in Montana were released. One well in Glacier County was abandoned.

A wildcat in South Dakota reported a show of oil and will run pipe and test.

Proposal to Unitize Hobbs

Dr. E. H. Wells, state geologist for New Mexico, upon his return from the meeting of Hobbs Pool operators at Fort Worth, Tex., at which was discussed plans for the unitization of that field, issued the following statement:

"The proposed plan for unitization of the Hobbs Pool submitted in Fort Worth a week ago failed to receive the required unanimous vote of the operators, and the revised plan with slight changes in the amount of interest of the companies, received a number of dissenting votes. Additional efforts will be made by the operators to work up a plan which will be unanimously approved by the Hobbs operators.

"Any unit law formulated by the operators must be approved by Secretary Ray Lyman Wilbur of the Department of the Interior; J. F. Hinkle, commissioner of public lands, and E. H. Wells, state geologist. The plans which have been considered specify that approval of at least 60 per cent of the fee land royalty interests must be obtained. A unitization plan agreed to by the operators could be approved as submitted, approved with modifications or rejected by the Government and state officials concerned.

"Commissioner Hinkle and State Geologist Wells both feel that any plan approved should provide for considerable additional drilling in undeveloped parts of the Hobbs Field.

"If the unit plan of operation should be put into effect, at Hobbs it would necessarily supersede the present proration agreement, which does not expire until January 10, 1933. The proration agreement can be terminated by anyone of the operators signing it or by the state land commissioner or the state geologist on 30 days' notice.

"Under unit operation, the entire Hobbs Pool would be operated by one company or operator as a single property. Instead of taking oil from each well, as is now done, the oil would be produced only from those wells where it could be obtained with greatest efficiency. Each 40-acre tract and fraction thereof would receive a fixed percentage of the total future output of the well irrespective of its individual production. In computing the interest or participation of the various tracts, the potential production of the wells on the tract and the structural position and the area of the tract have been considered.

"The chief advantages of unitization to the operators would be conservation of gas, reduced development and production costs, and greater recovery of oil. Unit operation should considerably increase the total oil production of the field over the amount obtainable under proration, and increase royalty payments to royalty owners, including the State, would result."

Lea County

In the Hobbs Pool, the Midwest Refining Co.'s No. 33 State, SE SW NW, Section 4-19-38, on the southwestern side of the field, which was completed in the fall of 1930 and given a potential of 4,536 bbls. per day, was reported the past week to be showing a little water. The quantity was 3½ per cent. When choked and reopened gradually it resumed making pipe line oil. This was the twenty-third well in that area to show water.

The Skelly Oil Co.'s No. 1 Turner, C W half SE NW, Section 34-18-38, an outside well in the southeastern part of the field and close to the edge, is drilling at 3,530 feet in anhydrite, but so far has not had any oil showing.

The Midwest Refining Co.'s No. 11 Terry, C NE SE, Section 9-19-38, is bottomed at 4,175 feet and waiting for official test for proration purposes. The same company's No. 11 Byers, C NE NW, Section 3-19-38, is digging cellar.

In the northern part of the field, the Skelly Oil Co. has made a location for its No. 1 McKinley, SW NW NW, Section 20-18-38, and is digging cellar. It is half a mile east of the Tidal Oil Co.'s No. 3 Hardin, and the same distance to the north and a little west of the California Co.'s No. 1 McKinley, the nearest producers. The Tidal and California companies have the only offset acreage which may have to be drilled.

The Empire Gas & Fuel Co.'s No. 4 Boon Hardin, NW cor., Section 19-18-38, cemented the 7-inch at 3,945 feet with 250 sacks and is waiting, and the Shell Petroleum Corp.'s No. 1 Lizzie Rice, SE cor., Section 13-18-37, is coring in lime at 4,051 feet.

In the Eunice area, the Tidal Oil Co.'s No. 1 State, C SW NE, Section 8-21-36, is at an interesting stage. Total depth is 3,897 feet. The 7-inch pipe was cemented at 3,744 feet with 300 sacks. It had oil showings at 3,390 feet, 3,490-3.532 feet, and 3,710-30 feet, and an increase in oil at 3,745-60 feet.

In the Lea area, The Texas Company's No. 3-A State, Lot 2, Section 2-21-33, is delayed at 3,040 feet, in salt, with a fishing job.

DeBaca County

The Landowners Oil Co.'s No. 1 McAdoo (State), SW cor. NE, Section 16-1s-27, Buffalo Creek, has a fishing job at a total depth of 5,092 feet.

Eddy County

Leonard & Levers' No. 8 State, C SE, Section 21-17-29, Jackson area, set the 8¼-inch at 255 feet. At this depth the formation was showing about 5 per cent salt.

Flynn, Welch & Yates' No. 63 State, SE cor. NW, Section 10-19-28, is drilling at 1,380 feet in anhydrite. The 8¼-inch was set at 580 feet.

W. A. Scott's No. 1 Kaiser, NW SE, Section 7-18-27, Compton Pool district, is drilling at 1,150 feet and had another oil show, the third, at 1,132 feet.

San Juan County

The Continental Oil Co.'s No. 30, SW NE SW, Section 12-29-19, on the southern end of the Rattlesnake Dome, had 200 feet of oil in the hole from the Dakota at 890-900 feet, and water at 900-02 feet. A test showed 185 bbls. of water and 5 bbls. of oil. It probably will be plugged back.

COLORADO

Weld-Morgan Counties

The Ohio Oil Co.'s No. 1 Butters, C SW SW, Section 7-6n-60, to the northeast of the Greasewood Pool, which was shut down at 6,715 feet to change over from rotary to cable tools after penetrating several feet of saturated sand in the Muddy, is preparing to make a test. It ran the sand pump and found 37 feet of cavings in the hole, enough to cover the sand. The oil was standing 3,500 feet in the hole. It probably will be several days before it will be known whether this well will be a commercial producer in the Muddy as it was necessary to cement off cavey ground above the sand. It is believed it will make some kind of a well. It is generally expected that it will be carried on down to test the Dakota and Lakota sands. A water well is being drilled to replace the supply from Jackson Lake. The Lakota has never been tested at Greasewood.

Manning & Terry's No. 1 Niles, C SE NE, Section 13-6n-61, is shut down at a total depth of 6,721 feet awaiting the outcome of No. 1 Butters.

The Tulsa-Fort Morgan Petroleum Co.'s No. 1 Anthes, C NE NE, Section 24-8n-59, New Raymer district, is shut down at 3,318 feet awaiting decision as to whether rotary will be installed or hole carried down with cable tools. It is through a sand generally identified as the Hygiene.

The Ramsey Petroleum Co.'s No. 1 St. Anthony, SW NE SE, Section 15-7n-59, is rigged and ready to spud as soon as water line is completed.

The Retter Oil Co.'s No. 1 Cronin, NW cor. SW, Section 24-1n-66, Fort Lupton district, is drilling below 625 feet, and its No. 2 Cronin, one location to the south, is below 700 feet and is expecting at any time a sand encountered in No. 1 Smith at 830 feet which had a good show of oil. Its No. 1 Smith, C E half, Section 14-1n-66, is shut down at 1,280 feet.

Delta County

The Black Canon Oil & Gas Co.'s No. 2, Lot 12, Section 5-15s-94, near Delta, is shut down for repairs at 390 feet.

Elbert County

The Progressive Oil & Land Co.'s No. 1 Pease, NE SE SW, Section 27-10s-60, Simla district, is reported completing arrangements with the Pulse Drilling Co. to move in a standard rig and 4,600 feet of casing to resume. It was drilled to 640 feet with a machine and has been standing for several months.

Larimer County

The Consolidated Drilling Co. has been organized as a common law trust to acquire finances with which to buy additional leases and complete No. 1-A Maxwell, SE NE NE, Section 25-8n-70, Bellvue district, northwest of Fort Collins. Last depth reported was 285 feet.

Charles A. Culter and others' No. 1 Affolt, SE, Section 4-4n-70, West Berthoud, is reported drilling at around 2,400 feet.

Las Animas County

P. W. Harr and others' No. 1 Barela, NW NE, Section 33-33s-62, Garcia Dome, spudded August 21, with standard rig, and is drilling at 480 feet. There was a show of oil at 401 feet. Harr's No. 1 Schneider, CSL SE SE, Section 10-33-63, is erecting steel derrick.

Routt County

The Texas Company's No. 4 Carstarphen-Irwin, NE NW NW, Section 5-6n-86, Tow Creek, an old well deepened from 3,278 feet, has been recompleted as a 30-bbl. pumper from the shale at a total depth of 3,860 feet. Same company's No. 1 Carstarphen-Irwin, NE SE NW, Section 5-6n-86, which was completed early in 1927 at 3,301 feet and swabbed better than 200 bbls. of 27.4 gravity oil initially, is rigging up and pulling rods and tubing to deepen.

Rio Blanco County

The Magnolia Petroleum Co.'s No. 1 Titley, NW cor. SW, Section 15-2s-96, Piceance Creek, is drilling below 1,253 feet in shale. The California Co.'s No. 1 California-Raven, NW SE, Section 30-2n-102, Rangely Dome, cemented the 9⅝-inch at 5,657 feet.

Moffat County

William A. Myers and others' No. 1 State, NW SW SW, Section 16-4n-101, Skull Creek, is drilling below 3,200 feet.

WYOMING

Natrona County

The Mutual Oil Syndicate's No. 2, C SW SE, Section 14-35-79, Midway Dome, topped the Muddy sand at 6,020 feet and cored about 8 feet into that horizon. The parts of the core recovered showed good saturation. The parts of the core lost, however, were from that section of the sand which showed the greatest saturation in No. 1, to the southeast. The 4½-inch casing is being run and will be cemented on top of the sand. Rotary equipment is being removed and the well will be completed with standard tools. It probably will be a week or more before it can be determined just what the well will do. A stray sand above the Muddy, in the Mowry shale, which yielded a bleeding core, will be cased off for the present while the Muddy is being tested. As soon as the equipment is released, it is planned to start another well, probably to the east of No. 1. The location has not yet been released.

Converse County

The Continental Oil Co.'s No. 30 Glenrock, SW SE SE, Section 4-33-76, Big Muddy, has been troubled with cavey ground and cemented back to 4,293 feet. Total depth is 4,413 feet. The Ohio Oil Co.'s No. 25 Kinney, SE SW SE, Section 4-33-76, cemented back to 3,200 feet and is preparing to drill out.

Weston County

Julius Peters and others' No. 1 Witzell, SE cor. NW, Section 30-46-64, Fiddler Creek, which was showing oil at 4,505 feet, on top of what is believed to be the Muddy, is running the 6⅝-inch to cement before drilling in.

There were no completions in the Osage Field. Three new operations were reported as follows: The Federal Oil Co. s

No. 4, NE SE SE, Section 15-46-64, is rigging up. The La Fleishe Oil Co.'s No. 17, C SE SW, Section 17-46-63, is cleaning out to drill into the sand at 760 feet and is slopping over with oil. The Rapp-Osage Oil Co.'s No. 2 Logan McCullough, CWL NW NW, Section 24-46-64, is drilling at 740 feet.

Routine operations include the following:

The Riggs Oil Co.'s No. 2, SE NE, Section 16-46-64, is drilling below 2,400 feet. The Genrral Oil Co.'s No. 1, SW cor. NW, Section 15-46-64, is drilling out cement at 2,100 feet, and the Tug Oil Co.'s No. 2, NE NW SW, Section 15-46-64, is drilling at 1,700 feet. The Central West Oil Co.'s No. 1, NE cor. SW, Section 15-46-64, cemented the 8¼-inch and is waiting, and the Wyoming-Dakota Oil Co.'s No. 1, SE SW NE, Section 15-46-64, is drilling at 1,925 feet. The Chadron-Osage Oil Co.'s No. 2 Thierry, NW NE, Section 31-46-63, is drilling at 300 feet, and the Homestake-Osage Oil Co.'s No. 4, NE cor. SW, Section 13-46-64, is running the 6⅝-inch on top of the sand at 1,435 feet. The Yellowstone Oil Co.'s No. 3, SE NE NW, Section 23-46-64, is running the 6⅝-inch on top of the sand at 1,795 feet. Sandell and others' No. 2, SE SW, Section 12-46-64, is spudding, and the Chadron-Osage Oil Co.'s No. 1, NE NE, Section 13-46-64, is spudding. The Paymac Oil Corp.'s No. 1 Toyne, SE NW NE, Section 3-46-64, is shut down for repairs at 515 feet.

Park County

The Henderson Producing Co.'s No. 10, SW NE NE, Section 31-58-99, South Elk Basin, cemented back from 700 feet to 240 feet to cover the Eagle sand.

Washakie County

The Bales Oil Trust's No. 1 Brome, NE NW, Section 31-48-90, Hidden Dome, is bottomed at 1,444 feet with the 6¼-inch at 1,430 feet. The bailer was run for two hours without lowering the oil below 1,350 feet. The oil is about 68 degrees gravity and is coming from one of the sands in the Frontier. Officials estimate the well at 75 to 150 bbls. initially. It is a diagonal offset to a well drilled by the Ohio Oil Co. several years ago which had some oil in the Frontier. This well failed to hold up and was abandoned. Hidden Dome is producing gas from the Frontier, but the pressure has shown a decline and is hardly sufficient to operate the pipe line to Greybull in cold weather. In 1927 the Ohio company drilled its No. 3, SW NE SE, Section 31-48-90, to 2,790 feet, where it found water in the Dakota sands. Since then it has been standing.

Fremont County

The Texas Company's No. 2 State-Ridgway, SE SW SW, Section 36-34-95, Alkali Butte, is coring at 3,060 feet in the Frontier sands.

MONTANA

Glacier County

Four locations in the Cut Bank area in Glacier County were released this week. One of these is the Montana Power Co.'s No. 1 Peoples, C SW NW, Section 20-34-5w, which is spudding. Nadeau Brothers have the contract. It is a little more than a mile to the west of the nearest producer in the gas area and between the gas wells and the oil activity to the southwest. The other three were released by R. C. Tarrant and are as follows: No. 1 John Haglund, NW SW NW, Section 13-34-6w, just to the north of Tarrant's No. 1 Haglund, which produced 85 bbls. per day on the pump. It is rigging up. No. 1 Hope, C SW SW, Section 18-34-5w, and No. 1 Britton, NE cor. SE, Section 14-34-6w, are locations.

Tarrant's No. 1 Reickhoff, SE SW NE, Section 3-34-6w, is drilling below 1,200 feet, and his No. 1 Yunck, NW cor., Section 12-34-6w, is drilling at 500 feet.

The Texas Company's No. 1 Peterson, SW NE SE, Section 22-36-5w, is bottomed at 2,740 feet and is pulling the 10-inch after setting the 8¼-inch.

The Milk River Petroleum Co.'s No. 1 Blackfeet, SW NE NE, Section 28-36-12w, Milk River district, is drilling below 4,150 feet in the Kootenai.

Cascade County

Buscher & Cassidy's No. 1 Johnson, NE cor. SE, Section 19-22-3e, Benton Lake, was abandoned at 1,965 feet after being unable to shut off water. It had a small show of oil in sand at 1,394-1,409 feet. Charles Merz and others' No. 1 Sheffelt, SE NW, Section 4-21-4e, Black Horse Lake, is preparing to underream to shut off water at 1,811 feet.

Fergus County

The Melton Corp.'s No. 1 Fenholt, SW cor., Section 24-21-17, Winifred district, encountered water that is flowing over the top at 3,300 feet and operations temporarily are at a standstill.

Toole County

The Imperial Natural Gas Co.'s No. 2 Danielson, SW cor. NW, Section 21-35-1w, Kevin-Sunburst Field, has been taken over by the Ferndale Oil & Gas Co. and is drilling below 1,000 feet. The Imperial retains a royalty interest in the 80 acres upon which the well is located and gave an option on an additional 80-acre tract. M. S. Brooks, Ferndale, Wash., is president of the new company.

Myers & Johnson's No. 1, SW SE NE, Section 19-34-1w, is bottomed at 1,350 feet and cemented the 6⅝-inch at 1,268 feet, on top of the Ellis.

The Liquid Gold Oil Co.'s No. 1 Roberts, C NW NE, Section 25-36-1e, Barthelote district, has resumed and is drilling at 2,510 feet.

Teton County

The California Co.'s No. 1 Sullivan, NW NE NW, Section 34-27-7w, Bynum district, cemented the 6¼-inch at 3,654 feet and is cleaning out.

SOUTH DAKOTA

The Wytex Oil & Gas Co.'s No. 1-A Hamilton, SE NE, Section 38-8n-1e, Oak Creek district, Butte County, is reported to have a show of oil in the Minnelusa at 1,530 feet and will case and test.

Good Well in Red Coulee Stimulates Work on Both Sides of International Border

By VICTOR LAURISTON
Staff Correspondent, Canadian Fields

CHATHAM, Ontario, Sept. 3.—The crude oil output in July from all Alberta fields, according to figures issued by the Alberta Lands and Mines Department, totaled 76,441 bbls., a slight decline from the June total of 78,157 bbls.

The Turner Valley Field in July produced 72,247 bbls. of crude naphtha and 971 bbls. of light crude oil. Red Coulee production for the month was 2,553 bbls. of light crude, and Wainwright production reached 670 bbls. of heavy crude.

Net production from Turner Valley was about 4½ per cent below the figures given, the difference being due to evaporation losses and refinery reductions. Sales from Turner Valley for the month totaled 66,861 bbls.; and oil in storage increased slightly to 17,842 bbls. at the end of the month.

Red Coulee Operations

In the international Red Coulee Field, the big production secured by Askalta Oils' No. 6 Farbo, SW NE, Section 2-37-4w, has stimulated drilling activity on both sides of the boundary. Askalta's No. 6 proved the biggest well yet drilled in the field, with a settled production around 500 bbls. It also indicated new possibilities on the west side of the structure. Askalta's No. 7 has been located in Section 2-27-4w, directly north of No. 6 and in the section immediately adjoining the Montana-Alberta boundary. The test has spudded in and is reported drilling below 150 feet. It offsets the Vanalta producing wells on the Alberta side of the boundary.

Directors of Monalta Oil Co. held a meeting this week at Lethbridge to consider resumption of drilling activities in Montana. The company at one time held extensive acreage on the Montana end of the Red Coulee Field, some of which has since been subleased and has several producing wells on the P. H. Buckley ranch. It is reported that the new drilling will be close in to the Askalta development.

On the Alberta side, D. A. McDonald Syndicate's No. 1-A Kotop, Section 2-1-17w4, is reported drilling around 1,800 feet, after getting some gas at 1,435 feet. This test is a little west of the Vanalta producers. Vanalta Oils, Ltd., of Vancouver, the pioneer company in the Alberta end of the field, is reported preparing to drill its No. 5 test. Location will probably be in Section 4-1-16w4, where the company now has four fair producing wells, Vanalta's Nos. 1, 2 and 4, drilled by the company itself, and No. 3 drilled by the Taylor Syndicate. The Vanalta sand in these wells gives a fair production from between 2,400 feet and 2,480 feet, and the company's four wells accounted for a major part of the July production of 2,553 bbls. (82 bbls. per day) from the Alberta end of the Red Coulee Field. Askalta's No. 6 producer is almost due south on the Montana side of the boundary, and Askalta's No. 7, recently spudded in, is still closer to the Vanalta producers.

A number of other companies hold undeveloped acreage in the Red Coulee Field and it is probable that additional drilling will be started this summer and fall.

South Turner Valley

In the far south end of the South Turner Valley Field, Mar-Jon-Freehold's No. 1, LSD 9, Section 28-18-2w5, is drilling below 4,900 feeet and will probably be the next completion in the field. The location is close to Merland's No. 1 in Section 27-18-2w5, which has been a consistently good producer since it was brought in more than a year ago. Mar-Jon's No. 1 is apparently getting close to the lime. Union Drilling Co. of Calgary is handling the contract, rotary tools being used.

Farther north, Canadian Royalties' No. 1, LSD 9, Section 5-19-2w5, is drilling below 2,770 feet after getting a distinct change in formation at 2,680 feet.

Central Turner Valley

In the Central Turner Valley Field, New McDougall-Segur Oil Co.'s No. 5, LSD 14, Section 12-20-3w5, entered the Dakota sand at 2,575 feet and is drilling below 2,600 feet with considerable seepage of light crude. The test is close to the McDougall-Segur sand, where production was looked for. McLeod Oil Co.'s No. 4, LSD 16, Section 1-20-3w5, is drilling below 7,000 feet.

Merland Operations

Reports issued by Merland Oil Co. operating in the South Turner Valley Field show that the company's No. 1 in Section 27-18-2w5, is yielding a steady and substantial revenue. The latest report for the year ending April 30, shows total revenue of $137,013, of which $86,999 came from sale of 27,610 bbls. of crude naphtha; $48,021 from 17,389 bbls. of discolored naphtha; $1,653 represented naphtha on hand and $330 gas consumed in operation. Operating expenses totaled $20,899. Of the net income, 50 per cent goes to Northwest Co., operating subsidiary of Imperial Oil, Ltd., under the drilling agreement made when the Imperial interests undertook to complete the well; while royalties on production to Calgary & Edmonton Corp. totaled $17,013. After allowing for some minor operating charges, income to the company was $49,561. Development expense and other items totaled $26,992 and depreciation $2,622, leaving a balance of $19,947 to carry forward. At the end of April, 1931, the company had a mortgage of $50,000, incurred before Imperial Oil, Ltd., took over completion of the well; the last of this has been wiped out since the period covered by the financial statement. Expenses of the company, outside of actual operating, were only $237.65. Merland's No. 1 is the only producing well in its section of the far south end of the field; it has consequently maintained a large and steady production, delivering 8,484 bbls. of crude naphtha in July, in which month the company ranked second among Turner Valley producing companies.

North Turner Valley

In the North Turner Valley, Model Oils' No. 2, LSD 16, Section 22-20-3w5, is fishing at 3,952 feet.

Hudson's Bay Test

In the Keho Lake district, southern Alberta, Hudson's Bay Oil & Gas Co.'s No. 1 Keho, LSD 2, Section 17-11-22w4, is again attempting to sidetrack lost tools in order to test the oil horizon in the top of the Madison limestone at 4,920 feet. Tools were lost last year, and at the close of the season the well was cemented back to 4,800 feet, having previously been drilled to about 4,925 feet. Sidetracking started late this spring, but the new hole was discovered to be following the old hole so closely that some of the old iron was falling in. The well was accordingly cemented back to 4,705 feet. At last reports the well was redrilling in new formation below 4,769 feet. R. Van A. Mills of the Hudson's Bay Oil & Gas Co., and M. A. Polen of the Continental Oil Co., are in close touch with operations.

The well is one of three in a northwest-southeast line which last fall got showings of high-grade crude in the top of the Madison. Of the three wells, Parco Oil Co.'s No. 1 Twin River, the farthest southeast and close to the international boundary, got a small production, around 5 to 10 bbls. a day, not enough to make it a commercial well. Texas-Imperial's No. 1, a little northwest of Lethbridge, had merely a show and was abandoned. Hudson's Bay's No. 1 Keho was the farthest north of the three, and the initial show was reported the best of the three; in addition to which the well has what looks like a small commercial production from the overlying Benton shales.

Montana Operations

On the Montana side, Myers & Johnson's No. 1, in Section 19-34-1w, drilled by Calgary interests on a high point of the Kevin-Sunburst structure, is reported to have cased off a gas flow of 2,000,000 feet encountered in the Sunburst sand and is deepening below 1,200 feet, and looking for the Ellis at 1,350 feet.

On the Milk River structure, Milk River Petroleum Corp.'s No. 1, NE, Section 28-36n-12w, is drilling below 3,920

feet and is reported close to the first potential producing horizon.

Blood Reserve Test

Acreage of Commonwealth Petroleums, Ltd., on the Blood Indian Reserve, near Lethbridge, Alberta, will be tested by another company under arrangements recently concluded with the Commonwealth company. Commonwealth Petroleums, Ltd. blanketed the structure several years ago, and has since carried on extensive core drilling as a guide in locating a commercial test. Oil showings encountered in the top of the Madison in nearby areas have encouraged the starting of a commercial well. The new test will probably spud in early this fall.

Drilling in the Foothills

On the Moose Mountain structure, Elbow Oils' No. 1, LSD 11, Section 35-22-5w5, is standing at 3,542 feet, waiting for a new drilling line. The test is apparently close to a potential horizon in the Home sand.

On the Fisher Creek structure, farther south, Cotton Belt Mines' No. 1, LSD 5, Section 21-21-4w5, is shut down at 3,142 feet.

In the old Oil City Field near Waterton, Oil City Royalties' No. 1, Section 30-1-30w4, is reported rigged up ready to spud in.

Okotoks Oil Prospect

A. J. A. Bell, of Okotoks, Alberta, is endeavoring to arrange for a test of the area east of Turner Valley as a potential crude oil reservoir from which the wet gas and naphtha of the Turner Valley Field is derived. Many operators have held a theory that the naphtha and wet gas are derived by vertical filtration from an underlying reservoir of heavier crude; though the idea of lateral filtration was suggested some years ago by Dr. J. A. Allan of the University of Alberta. Mr. Bell claims that oil will be found in the area extending northeasterly from Merland Oil Co.'s No. 1 in the far south end of the Turner Valley Field; and indicates a potential location 3 miles due south of Okotoks with possibilities of relatively shallow production at this point. Another potential field, according to Mr. Bell, is 20 miles south of Empress, Alberta. Neither of these areas has ever been conclusively tested.

Wainwright Prospects

With a new local refinery at Fabyan equipped to handle the Wainwright heavy crude, there is a prospect for additional drilling in the Wainwright Field of East Central Alberta. Montreal-Alberta Petroleums, Ltd., whose No. 1 test in LSD 2, Section 15-45-7w4 has been standing at 2,650 feet is reported planning to do some additional drilling. No. 1 failed to get production in the Wainwright sand, but may be deepened to test the underlying lime; or a second test of the Wainwright sand may be drilled.

Hargal Oils, Ltd., of Vancouver, is reported arranging for some drilling on its Wainwright acreage. The company was organized some years ago to take over the acreage and some of the wells of British Petroleums, Ltd. Before any serious work could be started, the Hargal company's attention was diverted to South Turner Valley where it drilled a deep test on the Home tract, Section 20-19-2w5. This test, put down for Hargal by Imperial Oil, Ltd., got only a small production. The company has several potential crude producers, originally drilled by British Petroleums, Ltd., in the Wainwright Field and may put down some additional wells.

Turner Valley Conservation

Following completion of tests in the Mercury area of South Turner Valley, the Turner Valley Gas Conservation Board has conducted a 72-hour test of wells in and adjacent to the Home tract. The wells included in these tests are Lowery Petroleums' No. 1, Wellingotn's No. 1, Freehold's No. 2, the Alberta Pacific, Associated, and Home wells, Baltac's No. 1, Hargal's No. 1, Calmont's Nos. 2, 4 and 7, Advance's No. 5-A, Dalhousie's No. 7, Royalite's No. 4, Structure's No. 1, Royalite's Nos. 6, 23 and 25, and Dome's No. 2. A total of 25 wells are affected.

Following the 72-hour test the wells are being run for 12 days on a naphtha production test at a pressure of not less than two-thirds the 72-hour closed in pressure; and afterward for 48 hours on 500 pounds pressure or less.

A further order of the board fixes new daily gas quotas for a number of South Turner Valley wells, as follows:

Well—	Daily quota (ft. of gas)
Mercury's No. 1	7,479,000
Hylo's No. 1	2,988,000
Merland's No. 1	5,599,000
East Crest's No. 2-A	3,239,000
Dalhousie's No. 6	22,000
Southern Lowery's No. 3	3,420,000

Model Oils' No. 1, in LSD 8, Section 22-20-3w5, North Turner Valley, is being given a special test. This well's production from the Madison lime is classified in Alberta government figures as crude naphtha but is graded by the refineries as a light crude oil. There is a comparatively small gas production and efforts have been made to have the well treated by the board as a crude oil producer and exempt from the conservation restrictions.

The Turner Valley Gas Conservation Board has listed Spooner Oils' Nos. 1 and 2, and Vulcan Oils' No. 1 wells as "defective" and excluded them from its testing program for the time being. Action in regard to these wells has been referred to the provincial lands and mines department. Officers of Spooner Oils, Ltd., state that the wells have been operating strictly on the 4.7 naphtha yield allowed by the board.

Spooner Oils, Ltd., is challenging the validity of the entire conservation legislation; and there is a possibility that, in order to expedite a final decision on the question, the company's appeal to the appellate decision of the Supreme Court of Alberta may be heard at Edmonton on September 19 instead of waiting for the Calgary sitting early in October.

Manitoba Gas Test

In the Manitou district, southwestern Manitoba, Commonwealth Petroleums' No. 2, LSD 2, Section 26-2-9-wPM, is drilling in Ordovician limestone below 2,280 feet, after cementing casing at 2,050 feet. The potential gas and oil horizon of the Winnipeg sand is looked for around 2,500 feet.

Sage Creek Test

In the Sage Creek district, southeastern British Columbia, Crow's Nest-Glacier Oil Co.'s No. 1, bottoming around 3,260 feet is reported running tubing again after clearing the hole of broken tubing and jammed drill rods. The hole, which has been redrilled for a considerable distance to sidetrack tools, is down to practically the old level where encouraging shows of gas and light crude were met a couple of years ago. In the course of fishing the well blew oil spray over the crown block for about half an hour.

Athadome Test Deepening

In the Athabaska district, northern Alberta, Athadome Oils' No. 1, N half, Section 20-72-24w4, near Mirror Landing, is reported to have resumed drilling after moving the boilers a safe distance back from the well. The well encountered a gas flow in what is apparently a stray sand at around 1,800 feet. W. Calder of the Alberta petroleum and natural gas branch, who visited the well, estimates the flow at between 3,000,000 and 4,000,000 feet a day. The gas was accompanied by some water, which made exact measurement impossible. Steps were taken to shut off the water and drilling is being resumed in a dry hole. It is expected that a few hundred feet more drilling will complete the test to the potential oil horizon.

Oil in Dawn Field

A second producer of high grade crude has been completed in the Dawn gas field, Lambton County, Ontario. Union Gas Co.'s No. 63, SW, Lot 24, Concession 2, Dawn Township, got its crude showings at the same geological depth as No. 61, the first crude producer,

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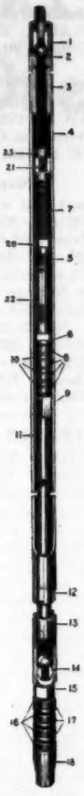

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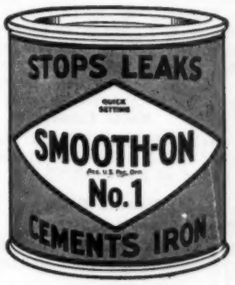

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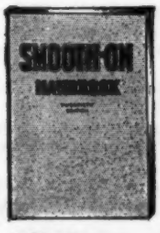

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which was finished a few weeks ago. No. 63 was carried below the oil sand to determine the top of the Guelph limestone. At this point it drilled into water and was plugged back, and will be shot in the oil sand. The production has not been determined, but the initial showings indicate that it is a larger well than No. 61 which had a pumping production of about 28 bbls.; and that it is a better quality of crude. There was a small gas flow, possibly 40,000 feet a day, enough to flow the oil at intervals. No. 63 is located about 600 feet northeast of No. 61, and the securing of production at this distance indicates a possible small oil pool in the west end of the Dawn gas field, rather than that the oil is coming from a crevice.

Ontario Drilling

In Euphemia Township, Lambton County, Vogel Syndicate's No. 3 shallow test in Lot 20, Concession 10, is reported finishing and looks like a dry hole.

In Sombra Township, north of Wilkesport, Black Bear Syndicate's No. 1, N half, Lot 15, Concession 13, is reported shut down at 420 feet. At this depth it has not yet got the lime, which seems at this point to be more deeply buried than in the shallow pools to the east.

It is reported that F. H. Stover & Son are moving a rig to a location in Concession 8, Raleigh Township, Kent County, where a test for gas will be drilled for the Dawn Oil & Gas Co. This well will test a possible extension of the small gas field in Concession 9, opened last year by the Olga Oil & Gas Co.

Hockley Valley Test

Edward E. Taylor and associates are drilling an important wildcat test for oil in Dufferin County, Ontario. The Taylor Syndicate has standard outfit rigged up in the Hockley Valley, not far from Orangeville, and about 60 miles north of Toronto. The area has possibilities of high grade crude in the Trenton limestone which at this point is much nearer the surface than in Dover oil and gas field in Kent County, where production was secured some 15 years ago.

Oklahoma Fields

(Continued from Page 50)

chine. Manahan and others' No. 1 Narconay (10 acres), NE cor. SW SW Section 10-7-8, is a rig.

Kay County

Carter Oil Co.'s No. 1 Hayes, NW cor. SE Section 15-27-3, old well drilled deeper, was abandoned at 3,458 feet.

Marshall County

Thomas and others' No. 1 Setliff, SW cor. SE SE SW Section 36-5s-6, is a machine. J. L. Dixon and others' No. 1 Rice, SE cor. Section 25-5s-5, was spudding. Heff and others' No. 2 Dilly, NW cor. SE SE Section 30-5s-5, was spudding.

Noble County

Manahan & Smith's No. 1 Mayhew, C N half NE NE Section 31-24-1w, was abandoned at 1,400 feet.

Pawnee County

Watchorn Oil & Gas Co.'s No. 4 Diamond, NW cor. NE NW Section 4-22-3, was abandoned at 2,773-2,850 feet.

Oklahoma County

Mid-Texas Co.'s No. 2 Vaughan, SE cor. SW NE Section 15-11-3w, is a rig. Harrell-Davis' No. 1 Prebyl, NE cor. SW Section 22-11-3w, is a rig. Phillips Petroleum Co.'s No. 2 Drew, NW cor. NE SW SE Section 22-11-3w, is a rig. Phillips Petroleum Co.'s No. 1 Devore, Block 1, Earps Addition, Section 22-11-3w, is a rig. Los Angeles Petroleum Co.'s No. 1 Levy, CWL NW SE Section 15-11-3w, made 2,730 bbls. from Wilcox sand at 6,393-6,491 feet. Grison Oil Co.'s No. 1 Little, NE cor. SW Section 22-11-3w, made 1,926 bbls. from 6,509-62 feet.

Pottawatomie County

Null and others' No. 1 Brandenburg, SW cor. NW SW Section 35-8-4, is a rig. Smith & Barnett's No. 1 Hawkins, SE cor. SW NW Section 19-7-4, is a rig.

Pontotoc County

Stanolind Oil & Gas Co. and others' No. 1 Allen, NW cor. SE NE Section 32-5-5, made 90 bbls. from 2,363-68 feet.

Seminole County

Spears Drilling Co.'s No. 1 Smith, SW cor. NW Section 18-9-6, is a rig. Amerada Petroleum Corp.'s No. 7 Chase, NW cor. SE Section 29-9-6, is a rig.

Stephens County

Gilbert and others' No. 4 Green, NW cor. SE SE NE Section 2-2s-8w, is a rig. Price and others' No. 2 Butler, SW cor. SE NW SE Section 32-2s-7w, is a rig. Chamberlain and others' No. 1 Parker, NE cor. SE SE Section 11-2s-8w, was abandoned at 1,770 feet. Pace and others' No. 3 Dilly, NW cor. SW NW SW Section 22-2s-7w, made 140 bbls. from 1,745-55 feet. Same operators' No. 1 McDonald, NW cor. NE NW Section 28-2s-7w, was abandoned at at 1,935 feet.

SPLENDID SAFETY RECORD

DALLAS, Tex., Sept. 3.—Nine departments of the Lone Star Gas Co., eight districts of the Community Natural and nine divisions of the Lone Star Gasoline Co. have received honor roll certificates for having perfect records of no lost time accidents during 1931. The following nine divisions of the pipe line department received certificates: Abilene, Coleman, Dallas, Duncan, Fox, Petrolia, Richland, Shamrock and Waco. Perfect records were made by 15 plants in the compressor department including Breckenridge, Brad, Caddo, Cheaney, Desdemona, Eastland, Gas City, Ibex, Joshua, Loco, Sipe Springs and four Ranger plants. In the gasoline department the following six plants were on the honor roll: Brazos, Gainesville, Gordon, Hollis, Pueblo and Tiffin. Three districts of the production department, Duncan, Petrolia and Strawn, had no lost time accidents. The Meridian Gas Co., an affiliated company, had a perfect score as did the gas measurement, inspection, telephone and production engineering departments and the Dallas Machine Shop.

Canadian Government May Continue Existing Oil Ban

CHATHAM, Ontario, Sept. 3.—Reports that the Aluminum Corp. of Canada had completed a contract to exchange 100,000,000 pounds of aluminum for shipments of Russian crude, displacing imports of some of the smaller Canadian refineries from the United States, are followed by information that the Canadian government will refuse to approve the contract, and will continue the existing ban on trade with Soviet Russia.

It is understood that about a year ago the Canadian aluminum interests were approached by Amtorg (the Soviet buying organization in New York) with a view to purchasing aluminum for gold; but owing to opposition from Ottawa the deal was allowed to drop. Later the Soviets again approached the aluminum company and a contract is reported to have been signed, involving the exchange of Canadian aluminum for Russian crude, arrangements being also made for refining of the crude in Montreal.

Following this reported deal, a Canadian manufacturer of rolling stock equipment opened negotiations with Amtorg with a view to the purchase by the Soviet of $3,500,000 of rolling stock equipment, payment to be made in crude oil. Before closing this contract, the Canadian interests inquired of the Federal government if any restrictions would be placed in the way of the deal. The reply at that time was that no Russian crude could be imported into Canada.

In regard to the proposed exchange of Canadian aluminum for Russian crude, officials of the Aluminum Co. of Canada have declined to comment; but it is understood that the Canadian government is adhering to the attitude that it will not allow the Soviet crude oil to enter the country.

The Oil Man's Calendar

September

10-17—Cleveland, Ohio, Society of Automotive Engineers.

12-16—Columbus, Ohio, National Tax Association.

14-16—Atlantic City, N. J., annual meeting, National Petroleum Association.

15—Des Moines, Iowa, Iowa Petroleum Association, Fort Des Moines Hotel.

15-17—Atlantic City, N. J., American Trade Association Executives.

21-23—Philadelphia, Pa., North American Gasoline Tax Conference.

21-22—Columbus, Ohio, Ohio Petroleum Marketers Association, Deshler-Wallick Hotel.

22-23—Chicago, National Association of Motor Bus Operators.

30-Oct. 1—Ponca City, Okla., American Institute of Mining and Metallurgical Engineers, Petroleum Division, Conoco Club.

October

3-7—Buffalo, N. Y., National Metal Exposition and National Metal Congress, and American Society for Steel Treating.

3-7—Washington, D. C., National Safety Council.

4-6—Toronto, Canada, Society of Automotive Engineers, transportation meeting.

10-14—Atlantic City, N. J., annual convention, American Gas Association.

11-12—Louisville, Ky., Kentucky Petroleum Marketers Association.

25-27—Kansas City, Mo., Four State Convention, Hotel President.

(?) —Chicago, Ill., American Society of Mechanical Engineers (fuel division).

November

10—Los Angeles, Calif., California Natural Gasoline Association.

10-12—Atlanta, Ga., Southeastern Economic Conference.

15-17—Houston, Tex., thirteenth annual meeting, American Petroleum Institute.

December

5—New Orleans, La., tenth annual Asphalt Paving Conference, and Association of Asphalt Paving Technologists.

5-9—New York, N. Y., American Society of Mechanical Engineers.

5-10—New York, N. Y., National Exposition of Power & Mechanical Engineering.

(?) —Great Falls, Mont., Rocky Mountain Oil and Gas Association, Rainbow Hotel.

1933

February-March

15-17—Columbus, Ohio, Ohio Petroleum Marketers Association, Deshler-Wallick Hotel.

Feb. 27-Mar. 14—Fourteenth Exposition of Chemical Industries, Grand Central Palace, N. Y.

April

20-21—Cleveland, Ohio, National Petroleum Association, Cleveland Hotel.

Issue Bulletin on Heating of Asphalt With Diphenyl

The University of Michigan has announced the publication of a bulletin of value to asphalt manufacturers covering research work using diphenyl vapors for the reduction of the hydrocarbon oil. This publication is known as Engineering Research Bulletin No. 23 and is available for $1 by writing to the department. W. L. McCabe, whose work is summarized in the bulletin, has stated his findings briefly as follows: "This bulletin describes experimental work carried out to determine the characteristics of a method of heating asphalt that uses condensing diphenyl vapor as a source of heat. A single tube semicommercial scale heater was constructed and heated with condensing diphenyl. Forced asphalt circulation was used.

"It was found that the asphalt was heated at a very satisfactory rate and under such accurate temperature control that even under extreme conditions no damage was done to the asphalt. Heat-transfer coefficients on both the diphenyl side and on the asphalt side were determined over a wide range of operating conditions. Overall coefficients of 32 to 42 B.t.u. per square foot per hour per degree Fahrenheit were obtained. The asphalt-film coefficients varied from 35 to 50 B.t.u. per square foot per hour per degree Fahrenheit and diphenyl coefficients from 250 to 330 B.t.u. per square foot per hour per degree Fahrenheit.

"No mechanical difficulties appeared that were not readily solved on the scale in which the experiments were conducted. As a by-product of the work, new data were obtained on the effect of heat on the density, penetration, softening point, and viscosity of asphalt.

Refinery Workers to Start Sales Drive on Furnace Oil

NEW YORK, Sept. 3.—Employes of the Bayonne refinery of the Tide Water Oil Co., in co-operation with the company's sales department, have launched a selling campaign on domestic heating oil.

Selling fuel oil to home owners, it has been found, presents a difficult problem, owing to the fact that it requires door-to-door canvassing by salesmen to find out where oil burners are installed, this increasing sales cost and lowering profits on the sales made.

The refinery employes are reporting to the sales department the names and addresses of all of their friends and neighbors using oil heat in their homes.

Texas Commission Issues New Oil Proration Orders

AUSTIN, Tex., Sept. 3.—The Texas Railroad Commission, effective September 1, raised the allowable production of the East Texas oil field from 325,000 to 375,000 bbls. daily. It increased the per well allowable production from 43 to 50 bbls. daily.

The commission made an order reducing the production allowables for the Yates, Van and Gulf Coast oil fields 10 per cent.

Conservation and proration orders for the Conroe area, Montgomery County, the new Government Wells extension in Duval County, and the new Tuleta area of Bee County were continued in effect in an order extending them.

NOT EMPLOYING WORKERS

NEW YORK, Sept. 3.—Announcement that actual construction work on the Iraq pipe line will get under way November 1 has led to a deluge of inquiries from American welders and other pipe line workers desirous of going to Iraq. At the Near East Development Co. headquarters, 26 Broadway, it is learned that the full complement of American field workers called for by construction engineers on the job in Iraq thus far has been entirely filled up, and no additional hiring is being done or is contemplated at this time.

Zwolle Field, Louisiana, Has Successful Week, Completing Six Oil Wells, One Dry Hole

By J. R. CRUMPTON
Staff Correspondent, Louisiana-Arkansas

SHREVEPORT, La., Sept. 5.—The North Louisiana district furnished all of the completed wells reported in this division during the past week, and scored a high average with seven oil wells and one dry hole. The Zwolle chalk rock field in Sabine Parish, the only active proven area, experienced its most successful week this year. This field reported seven of the eight completions and had the usual average of six oil wells and only one dry hole.

Roberts & Sledge's No. 2 Sabine Lumber Co., Section 5-7-13, has not been officially completed but indications are that it will not make the gusher as indicated by its first initial flow a week ago. The well flowed 150 bbls. the first 1½ hours from 2,480 feet, then bridged over and has since refused to flow. The operators are setting 2-inch tubing with packer in an effort to revive the flow. The test is an extension of production of more than 1 mile to the southwest toward Blue Lake, the original producing spot of the Zwolle district. The other producers in this field were equally divided between the western and eastern flanks.

Abbott & Rankin's No. 1 Towery, Section 1-7-13, was completed as a 30-bbl. pumper from 2,340 feet. To the southwest, the Coates Petroleum Co.'s No. 2-B Nulton, Section 3-7-13, is flowing 125 bbls. from 2,396 feet, and the Cliff Oil & Gas Co.'s No. 1-A Martinez School, Section 4-7-13, farther to the southwest, is pumping 40 bbls. daily from 2,450 feet. On the eastern side of the field, Howard & Dooly's No. 1 Williams, Section 13-7-11, was a 12-bbl. pumper, and C. T. Ruffian's No. 2 Lilley, Section 8-7-11, was pumping 65 bbls. from 2,454 feet. The Service Drilling Corp.'s No. 3-A Gardner, Section 12-7-11, was completed from 2,589 feet pumping 20 bbls. of oil and 100 bbls. of salt water daily. The only dry hole for the week was completed near the middle of Section 4-7-13, on the southwestern flank. Hutchins and others' No. 1 Garcia was dry and abandoned at 2,465 feet.

Grant Parish Producer

Grant Parish came back into the new production column after an absence of several years. Bordering the Urania Field, which is located near the adjoining lines of LaSalle, Winn and Grant Parishes, the Security Petroleum Co.'s No. 1 Swope estate, Section 16-9-1e, was completed as a 10-bbl. pumper from 1,585 feet.

Wildcat activity in North Louisiana has temporarily slowed down while the operators are curing titles on large blocks under lease and carrying drilling clauses for operations to begin within the next three months. New locations fell off from 13 last week to 4 for the current week in this district. The Zwolle area had only 2 new operations staked this week in comparison with 11 the week before. The Louana Oil & Gas Co. has derrick up on its No. 2 Cushman, Section 33-19-16, in the western part of Caddo Parish near Blanchard. This company's No. 1 Cushman, in the same section, stands temporarily abandoned at 2,800 feet after testing less than 1,000,000 feet of gas. In Red River Parish, Edwards & Clay are rigging up on their No. 1 Louisiana Delta Pecan Co., Section 27-13-11. One new operation is reported for DeSoto Parish. E. J. Stanberry is rigging up his No. 1 Naborton Oil & Gas Co., in Section 32-13-11. In the Dixie area of Caddo Parish, the D. C. R. Oil Co. has started a new test as its No. 1 Caddo School Board, Section 16-19-14. The well is drilling at 1,520 feet.

In the Sugar Creek Trinity gas area of Claiborne Parish, the Triangle Drilling Co.'s No. 1 Warren Brown, Section 1-19-6, is testing at 4,460 feet. This test is being watched with interest as it is three-fourths of a mile west of previous gas production in that field. The Sugar Creek Field, with seven producing high pressure gas wells from the Oolitic lime of the Trinity around the 4,350-foot level, is owned jointly by the Triangle Drilling Co., the Standard Oil Co. of Louisiana and the United Gas Public Service Co. The gas from this area has a high gasoline content, and it is a general opinion among North Louisiana operators that a prolific oil-bearing sand underlies the gas-producing horizon. None of the other tests in this district developed anything of interest during the week.

A wildcat in the gas area of Concordia Parish, M. M. Stoker's No. 1 Gillespie, Section 56-8-10, on drill stem test, tested salt water at 1,360 feet and is drilling ahead at 1,451 feet. This well is located on a 4,000-acre block. Two wildcats are active in Natchitoches Parish. The Natchitoches Petroleum Co.'s No. 1 Edenborn, Section 4-11-6w, is drilling at 402 feet, and the Saline Bayou Development Co.'s No. 1 Bodcaw Lumber Co., Section 9-12-15, is drilling at 1,534 feet. The latter well is located near an old salt dome from which salt was mined during the Civil War.

A recapitulation of the month's activities in North Louisiana shows 35 completions resulting in 16 oil wells, 1 gas well and 18 dry holes. The Zwolle Field furnished 15 of the producers and had 16 dusters. There are 58 locations and rigs on locations in this district and 108 active drilling wells.

ARKANSAS

Fitzwater and others' No. 1 Beck, Section 33-15-16, Miller County, continues to look good with further testing and indications are that it will make a commercial oil well. The well has been swabbed down to within 150 feet of the bottom and showed considerable oil with some gas with the total depth still at 2,932 feet. Since bailing the drilling fluid from the hole, the oil shows a higher gravity and will probably test around 35. It is reported that only 6 inches of the oil sand has been penetrated, and that the operators will deepen in an effort to get a flowing well. At the present depth, it is estimated to be good for a 10 to 20-bbl. pumper. There are several other tests rigging up in this vicinity which will be watched with interest.

Other wildcats in Arkansas follows: Cleburne County, Frank S. Craver and others' No. 2 Doniphan Lumber Co., Section 24-11-9, drilling at 575 feet; Drew County, the Co-operative Development Co.'s No. 1 Ogles, Section 35-13-5, drilling in hard shale at 3,165 feet; Franklin County, Ozark Natural Gas Co.'s No. 1 Monroe, Section 13-8-29, drilling at 970 feet; St. Francis County, Kentucky Oil & Gas Co.'s No. 1 Britton, Section 1-4-1, drilling in hard shale at 2,935 feet.

ALABAMA

The DeSoto Oil & Gas Corp.'s No. 1 Gardner, Section 22-15s-16w, Lamar County, is still making hole slowly with cable tools. After encountering a good oil show at 3,125 feet and bailing several barrels of oil from the hole, the operators are now looking for the sand that produces gas in the Amory Field in Monroe County, Mississippi, about 18 miles northwest. The total depth of the hole at this writing is 3,184 feet. In Mobile County, J. C. Prine's No. 1 M. & O. Railroad, Section 33-2n-4w, still has drill stem stuck at 700 feet with the bottom of the hole at 2,612 feet.

EAST TEXAS (Border Counties)

Marion County will experience an interesting deep test with the resumption of drilling on the Baunoch Development Co.'s No. 1 Miller, Henry Fulgram Survey. The well has been shut down for some time at 4,182 feet while a larger rig was moved on location to deepen. It is reported that the test will be drilled to 6,000 feet in an effort to pick up the gas-producing horizon of the Rodessa Field in the northwestern part of Caddo Parish, North Louisiana, which is a few miles northeast of the wildcat. The Rodessa Field produces gas with a high gasoline content from the Oolitic lime of the upper Trinity around the 5,500-foot level

Wildcat Operations in Louisiana-Arkansas

(Rotary operations unless otherwise designated)

North Louisiana

AVOYELLES PARISH

Company, well, farm name, section and block—	Remarks:
T. J. Woodley, tr.'s No. 1 Thompson & Koltz, 2,640 ft. E, 200 ft. S, NW cor., Sec. 11-2n-5e	Rigging up.

BEAUREGARD PARISH

DeRidder Development Co.'s No. 1 McMahan, 158 ft. S, 160 ft. W NE cor. NW, Sec. 32-2s-9w	S.D. 1,265 ft.

BIENVILLE PARISH

Blacklake Dev. Co.'s No. 1 Holstow, 600 ft. W, 100 ft. S, NE cor. SE SE, Sec. 17-13-6	Washing to bottom 2,674 ft.

BOSSIER PARISH

Breazelle & Steckoll's No. 1 Nattin, C SW NE, Sec. 15-22-14	S.D. 2,879 ft.

CADDO PARISH

Louana O. & G. Co.'s No. 2 Cushman, 250 ft. N and E, SW cor., Sec. 33-19-16	Derrick.

CALDWELL PARISH

Carter Bell's No. 1 Taylor, 150 ft. S, 150 ft. E, NW cor. NE SE, Sec. 17-14-4	S.D. 2,712 ft.
Hudson et al's No. 1 Burton, Sec. 25-12-3e	S.D. 2,950 ft.

CLAIBORNE PARISH

Leue Oil Co.'s No. 1 Kinder, Sec. 2-21-7	Rigging up on old well.
Robertson & Aurand's No. 1 Smith, 200 ft. S and E, NW cor. SE NE, Sec. 8-21-7	Derrick.

CONCORDIA PARISH

M. M. Stoker et al's No. 1 Gillespie, Sec. 56-8-10	Drlg. 1,451 ft.

DE SOTO PARISH

Coker et al's No. 1 Boone, 300 ft. N and W, SE cor. SW NW, Sec. 12-10-11	S.D. 60 ft.
Donley & Chastain's No. 1 H. Smith, 326 ft. W, 600 ft. N, SE cor., Sec. 21-14-15	S.D. 2,470 ft.
Honeycut O. & G. Co.'s No. 1 Porter, 423 ft. S, 414 ft. W, NE cor. NW NE, Sec. 26-12-13	Derrick.
S. A. Guy's No. 1 Dowling, 469 ft. E, 282 ft. S, NW cor. NE, Sec. 31-14-14	S.D. 2,970 ft.
E. T. Oakes' No. 1 R. H. Bryant et al, 200 ft. N and W, SE cor. NE NW, Sec. 30-12-15	Coring 3,930 ft.
DeSoto Dev. Co.'s No. 1 Nickey, Sec. 7-13-12	Partly rigged up and S.D.
G. C. Smith et al's No. 1 Wollums, 330 ft. N and W, SE cor. Sec. 30-12-12	Drlg. 480 ft.
E. J. Stanberry's No. 1 Naborton O. & G. Co., Sec. 32-13-11	Rigging up
Walters-Nicholson, tr.'s No. 1 Jim Guy, Sec. 3-11-13	S.D. 2,764 ft.
Jack Whitson's No. 1 Sanders, 330 ft. N and E, SW cor., Sec. 19-11-13	Derrick—rigging up.

GRANT PARISH

Security Pet. Corp.'s No. 1 Swope est., Sec. 16-9-1e, 1,698 ft. N, 220 ft. E, SW cor. Sec.	Pumping 10 bbls. 1,585 ft.
O. Robichaux's No. 1 T. M. Bradford, 1,870 ft. E, 314 ft. S, NW cor., Sec. 16-9n-1e	Derrick.

MOREHOUSE PARISH

Feazel & Kalil's No. 1 Davenport, Sec. 28-21-4e	S.D. 119 ft.

NATCHITOCHES PARISH

W. M. Coates' No. 1 Ross Olive, Sec. 10-9-10, 660 ft. S and E from cen. of Sec.	S.D. 2,010 ft.
Dr. H. S. Gerson's No. 1 Smith, Sec. 11-10-8, 2,000 ft. N, NE cor. of irregular Sec. 10, in Sec. 11	T.A. 1,875 ft.

(Continued on Page 70)

Daily Average Runs

There was a net decrease of 100 bbls. in the daily average runs from the fields of North Louisiana and Arkansas during the past week. The former, with the Zwolle Field having a steady gain, showed an increase of 435 bbls. but the Smackover Field in Arkansas more than offset this to make the net loss. The daily average runs from the several pools were:

NORTH LOUISIANA

	Bbls
Caddo, light	5,006
Caddo, heavy	1,870
Cotton Valley	750
DeSoto and Red River	1,890
Elm Grove	326
Haynesville	4,300
Holly	250
Homer	2,800
Pleasant Hill	260
Sarepta-Carterville	865
Urania	3,695
Zwolle	7,720
Total North Louisiana	29,720
Total previous week	29,285
Increase	435

ARKANSAS

Champagnolle	1,760
El Dorado	3,000
Lisbon	465
Nevada	970
Smackover, light	2,385
Smackover, heavy	23,665
Stephens	520
Urbana	320
Total Arkansas	33,585
Total previous week	34,120
Decrease	535
Total both states	63,305
Total previous week	63,405
Decrease	100

Possible New Producing Horizon in Bee County; New Serpentine Field in Southern Bastrop

By B. D. STEVENSON
Staff Correspondent, Southwest Texas Fields

SAN ANTONIO, Tex., Sept. 5.—Anticipation that a new producing horizon may be uncovered by the Howeth & O'Neil No. 1 King, in Bee County, final proving of a new Serpentine field in southern Bastrop County and a close watch on developments in the Tuleta Field in Bee County and both the north and south end of the Government Wells area in Duval County are engaging the attention of operators in Southwest Texas at this time. Also two small refineries are now taking crude from the southern Starr County pools, and this with demand for the product by pumping plants for the irrigation systems along the Rio Grande is making considerable market for the two Starr County pools.

There has been confusion in Bee County as to the top of the Jackson and the Howeth & O'Neil No. 1 King, it is claimed, may develop some interesting information. Marine Oligocene, producing in fields nearer the coast line, hat not been identified as far back from the coast as the location of No. 1 King, and there is some claim that final identification of formations may disclose that the Marine Vicksburg, lower member of the Oligocene may be identified in the No. 1 King. This whole question is much in controversy and is discussed by geologists every time they meet, and any well drilled deep enough between the Pettus Field and the coast fields is particularly watched for information along that line. The hope has been that the No. 1 King would pick up production in the Vicksburg.

Tuleta Field

Bee County's new field, the Tuleta Pool, now consisting of the discovery well and one gas well to the west and two wells in course of being completed, is still waiting for more information to indicate what the field is really going to do. Elevations and depths in the table will explain something of the situation, it being remembered that the Nichols No. 1 Harris, the discovery well, is 40 feet from the north line and 150 feet from the west line of its 10-acre tract, while the Texas No. 1 Cox is due west of it 300 feet, Coquat & Hawn in the center of the first 10-acre tract south of that on which the discovery well is located and O'Neil and C.R.&M. Drilling Co. in the center of the 10-acre tract east of the discovery well.

Results from testing Coquat & Hawn's No. 1 Harris had not been reported as this was mailed. It is understood that the O'Neil and C.R.&M. No. 1 Harris had a good looking oil sand and is down the flank enough to have made an oil well but seems to have not taken elevation into account and got into water. If successful in plugging back and making an oil well it will help prove the theory. Coquat & Hawn stopped drilling at 4,090 feet which would be —3,767 subsea or top of the sand for O'Neil and C.R.& M. and so is expected to avoid water. If it comes in a good oil well it will about establish the situation for the field. Southern Drilling Co. is a quarter of a mile south of Coquat & Hawn and inside of a week should be in the sand. Also Smith's No. 1 Weiss, 2 miles northeast should be hitting the sand in a week or two and will be an important well.

ELEVATIONS AND DEPTHS IN TULETA FIELD

	Elev.	Top sand	Subsea top sand	Total depth	
Nichols' discovery well	343	4,087	—3,744	4,104	gas and oil
Texas' No. 1 Cox	353	4,074	—3,721	4,130	gas
O'Neil and C.R.&M.	310	4,077	—3 767	4,109	gas and water
Coquat & Hawn	323	4,082	—3,759	....	testing

Duval County

The Texas Company's No. 2 Riggs, 660 feet south of production in the North Government Wells Field in Duval County, at a total depth of 2,279 feet, is producing from the first of the two sands found and in other tests has shown gas. It is producing oil and the initial gauge was 20 bbls. an hour. It is an important proposition for the reason that Luse & Russ a quarter mile south and a quarter mile west of it got water in the lower sand, and Buchanan's No. 1 Smith, quarter mile east and north got water, and San Diego Oil Corp.'s No. 1 Heller, a quarter mile north of Buchanan got water. These were thought to establish the water line at subsea, —1,783 feet, and did so far as the second sand is concerned. San Diego's No. 1 Heller is plugging back to work on the upper of the two sands which are separated in the field by an interval of about 20 to 30 feet of shale. The sands thicken on the east flank or downdip flank of the field and there is a possibility that this first sand which other wells have cased off may turn out to carry considerable oil.

Also there is possibility that there is some confusion as to the sand. Careful paleontological identifications have not been made and drillers may think they are in one sand when they are in another, especially if a sand pinches out and is not present. The lower sand undoubtedly pinches out on the west side and The Texas Company's No. 2 D. F. Freer, which extended the field 660 feet west and is reported completed at 2,302 feet topping the sand at 2,285 feet may be producing from the first sand.

Luse & Russ' (Petroleum Finance Corp.) No. 1 Hahl, on the south, plugged back and made a fresh water well in the Cole sand at a little below 1,500 feet.

Two wells are starting at the north end of the pool which wil be watched with interest. Highland Oil Co.'s No. 1 Lundell, 330 feet from the south and west lines of the south 80 acres of the northeast quarter of Survey 42, which is next north of Survey 44, will mean over a half mile extension north if it comes in a producer. The first producers on the south, four tests in a row, were all big wells, one of them the Windsor Oil Co.'s No. 1 Cummings, being one of the best wells in the field. Nothing has been drilled north of them, though Byrd got a gas well in the upper sand a quarter mile east and a quarter mile north and had water in the lower sand.

Hamill & Hamill are starting the No. 1 Hahl, half way between Highland Oil Co.'s test and the north line of producers.

Seacord & Putnam's No. 1 Johnson, the farthest northwest producer, the discovery well at 1,567-74 feet, in the Cole sand, has been deepened to the lower pay, getting the sand at 2,303-13 feet and came in making 40 bbls. an hour. It makes the north end of the field look good. The field is taking a slightly northeast-southwest trend thus far and Seacord & Putnam are the farthest to the northwest. The Highland Oil Co.'s No. 1 Lundell, mentioned above, is a half mile east and three-quarters of a mile north of it.

Sarnosa Pool

At the close of the week the Sarnosa Pool was waiting for the completion of the Edwin M. Jones' No. 1 Williams, a mile southwest of production with casing set without making a drill stem test and sand at about the right depth. If it produces it will give the field the most important extension it has yet had.

Balcones Fault Zone

Parsons & Mayfield's No. 1 Carroll, in southern Bastrop County, is going on the pump, in Serpentine from 2,248 to 2,378 feet, and it is estimated it will make a 25-bbl. well at least. It opens a new Serpentine field. It is about 10 miles southwest of the town of Bastrop and 6 miles from Dale, Lyotton Springs and Yoast, three Serpentine pools southwest and west of it. The oil first reported as being heavy black oil turns out to be light green and about the same gravity as Lytton Springs, around 37 A.P.I. Sun Oil Co. owned the block and retained a half interest in it. The other Serpentine pools have all been a little spotted in production, there being spots where the Serpentine is tight and compact and does not produce so copiously, and in some few locations inside the field failed to produce at all while others where the formation is porous have been big producers. Further drilling in the new Serpentine field may furnish big wells.

In the Sal-Mar Field in Guadalupe County, the George E. Smith No. 1 Behring had a showing in chalk but tested dry after setting casing and will go on down to the Edwards. This is the third test since the discovery well came in producing in the chalk to prove a failure in that formation and the Wormser No. 1 Pfullman, 450 feet west of the discovery well that drilled to the Edwards, has been abandoned. It made sulphur water and was unable to plug back.

In the upper part of the Balcones fault zone, M. W. Eiser's No. 1 Citizens Bank of Waco, at 1,842 feet, total depth, is reaming down to get a core. Top of the chalk has not been positively identified but the Wilson-Broach No. 1 White, a couple of miles northeast and with only a few feet difference in elevation, topped the Austin chalk at 2,069 feet which would seem to indicate that Eiser is very high if in the chalk at 1,842 feet. Paton Brothers, in northern Lee, drilling one of the most interesting and important wildcats in the upper Balcones fault, is still having a lot of trouble with a fishing job. This is the second hole started, the first one having been lost with a bad fishing job.

Kerr County

Eastland Oil Co.'s No. 1 Love in western Kerr County, which was carrying a hole full of water and having trouble with in finally got it cased off and at last depth reported had a sand at 3,407-27 feet, which was dry. It is continuing to drill and if it has no more bad luck ought to begin hitting sands in the Pennsylvania carrying oil.

Government Wells

Late Saturday San Diego Oil Co. finished plugging back and completing No. 1 Heller on the east edge of the North Government Wells Field and made a 100-bbl. per day well in the first of the two sands of the field, and the second well to be completed in that sand, which has been known to carry a considerable volume of gas but has been passed up for the most part without testing. The Byrd No. 1 Wright, the farthest northeast producer in the field, after getting water in the second sand, plugged back and made a gas well in the first sand. There are now two oil wells and one gas well in that sand, the other oil well being The Texas Company's No. 2 Riggs, the farthest south producer in the field.

With an elevation of 561 feet, No. 1 Heller got the first sand at 2,310-20 feet and the second sand carrying water at 2,346 feet and drilled into it only 3 feet. That sand is about 40 feet thick.

Bexar County Wildcat

Rollin V. Hill, Sr.'s No. 1 Max Boeck.

(Continued on Page 63)

Wildcat Operations in Southwest Texas

Week Ending September 2

ATASCOSA COUNTY

Company, farm and location—	Remarks:
American Central Oil Co.'s No. 2 Mary McConnell, 150 ft. W of E line, 300 ft. S of No. 1, Blk. 138, W. C. M. Baker Sur., 3 miles W and 6 miles S from Somerset	T.D. 1,660 ft.; standing.
Etheridge et al's No. 1 McCowen-Dickinson, Campbell-Berry Sur.	T.D. 800 ft.; fishing.

BANDERA COUNTY

F. A. Brown's No. 1 R. B. Watson, 600 ft. N of cen. of S line of Sec. 71	T.D. 330 ft.; drlg.

BASTROP COUNTY

Marts & Beavens' No. 1 A. Neidig, 150 ft. from E line, 525 ft. from N line of tract in J. Burleson Sur.	T.D. 2,000 ft.; drlg.
Parsons & Mayfields' No. 1 Carroll, N of town of Bastrop	T.D. 2,278 ft.; installing pump; est. 25 bbls.
Properties Trading Co.'s No. 1 Henry Freitag, 400 ft. from SE line, 1,300 ft. from NE line of P. Conley Sur.	T.D. 1,450 ft.; drlg.
R. R. Ogden's No. 1 Riddle, 350 ft. from E line, 750 ft. from N line of 94.5-ac. tract in Joshua Gray Sur.	Rigging up.

BEE COUNTY

Fitzgerald & Pryer's No. 1 Albert Johnson in M. Alcarte Sur.	Rigged up and S.D.
Howeth & O'Neal's No. 1 King ranch, 660 ft. from N and W lines of Kleberg 140-acre tract in Robert Stevenson Sur.	T.D. 4,420 ft.; drlg.
C. F. Nichols' No. 1 Kimball, 225 ft. N, 40 deg. W of Grayburg Oil Co.'s No. 1 Kimball	T.D. 3,580 ft. in sand.
Nichols & Bruner's No. 1 Grover Heidenfels in John Bryan Sur., 391 ft. from S line, 1,950 ft. from E line of tract	Rigging up.
J. Stanley Smith's No. 1 Weiss, 3,096 ft. E of E line of Sec. 1, Ragsley Subd., and 290 ft. from N line of Uranga grant	Spudded in.

(Continued on Page 60)

30
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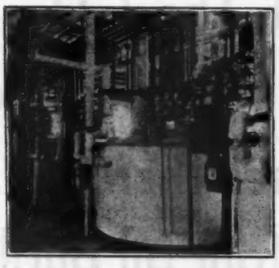

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California Producers Warned of Lower Winter Demand and Danger in Overproduction

By L. P. STOCKMAN
Staff Correspondent, California Fields

LOS ANGELES, Calif., Sept. 3.—Faced with the probability of a substantial decline in consumption during the approaching winter months, California operators are formulating plans to cope with the situation, particularly in the event that the demand drops below expectations. William Keck, chairman of the executive committee for equitable curtailment, has appointed a committee of three to conduct a survey to determine estimated requirements during the winter months.

Chairman Keck appointed an independent fact-finding committee, consisting of R. E. Allen, assistant oil umpire; William Geis of the Oil Producers Sales Agency, and L. A. Cranston of the Honolulu Consolidated Oil Co., to make the survey of estimated requirements during the next several months. The appointment of this committee was prompted by inquiries from major companies as to whether the executive committee on curtailment had taken any steps to estimate requirements in the immediate future.

It is a foregone conclusion that California producers will be obliged to effect an additional curtailment during the approaching period of lower consumption, but the amount of additional curtailment necessary depends upon the outcome of the survey now being conducted. It is the opinion of those in close touch with the situation that California producers will be obliged to effect an additional curtailment of approximately 35,000 bbls. per day in order to balance supply and demand and thus stabilize prices.

A logical step has been suggested in order to equalize curtailment, and this proposal may receive careful consideration. It has been suggested that the additional curtailment necessary to balance supply and demand be placed on a graduated basis so maximum proration would be effected during December and January, the periods of lowest consumption.

A new allotment is expected to be established effective October 1, and it is safe to assume that the new allowable for the winter period will be substantially below the present allotment of 475,600 bbls. per day. Considerable doubt exists as to the possible effectiveness of curtailment during the winter, and while some doubt the ability of the executive committee to effect any additional curtailment, the matter rests entirely with producers. If crude oil production is brought down to demand, existing prices can be maintained, but if production exceeds demand there is very little hope of stabilizing prices. This is of particular interest because of the fact that curtailment has not been especially effective during the past 60 days.

Producers Warned

Rush M. Blodget, general manager of the Oil Producers Sales Agency of California, has warned California producers that they are seriously jeopardizing the curtailment program and the existing price structure. In a communication to producers, Mr. Blodget informed them that "many fields are open. Are we breaking our bargain? May we, for what we deem the good of all, take the liberty of calling attention to the existing situation. The producer in years gone by has sat silently by and permitted the statistical picture to be drawn by the purchasers of crude oil. The purchasers then posted a price according to their deductions from the facts presented. When the Oil Producers Sales Agency was organized, it was with the idea that producers should obtain their own statistical data and should likewise have some voice in the fixing of the price of their oil. Both purchasers and producers were informed of this trend of thought in open meetings and by printed word. We have gone a long way in a conservative fashion toward dividing the responsibility of fixing the price of oil equally between sellers and buyers. We have placed the industry in such a position, under the law, that the buyers and sellers have been able to bargain for the price of oil. Honest bargaining, with due regard to the rights of the consumer, is a vital factor in honest competition. It was a stupendous event in May, 1932, when the producer collectively first bargained for a better price for his oil. Are we going to prove impotent in holding our gains? Are we going to break our bargain?"

General Manager Blodget has also taken producers to task for their failure to continue effective curtailment. In his communication addressed to producers he writes, "We asked for a price increase in May, 1932, and were told that we could have it if we curtailed within reasonable limits. We curtailed and obtained the price increase. It is not the supreme effort of a moment that is the measure of a man or an industry. It is the ability to endure. Many fields are overproducing contrary to our bargain. The vast majority of producers have, with remarkable self-restraint, curtailed production. They have shown that the preponderating majority of oil producers can intelligently adjust themselves to our modern complex economic life in which each barrel of oil aboveground is a definite recognized factor. But a few have become careless and have not become industry-conscious and have not come to realize that overproduction of any one may cause loss to all. The umpire cannot curtail production. This is a personal problem of each producer. The umpire can help by fighting for the equities and by trying to keep everybody informed. Rumbles of discontent at our breach of our bargain have come to us. A zero hour may soon be fixed at which we may lose our gains, not alone our advance in price but also the advantageous position of being able to bargain. It is yet possible to prove that we are able to co-operate. Other industries settle their difference and keep them settled. Let us prove that we can keep ours settled. Get your production down immediately. This measure is in the interest of all, including the consumer, labor, material men and the producer himself."

Kettleman Hills

The Associated Oil Co. focused the attention of operators on the Kettleman North Dome Field during the early part of the week by completing No. 3 Whepley, a new well flowing 13,925 bbls. of exceptionally clean 34.3 gravity oil and 15,000,000 feet of natural gas per day from 8,858 feet. This new well is the largest completion finished in several months and is, incidentally, the second deepest well to be drilled in the North Dome up to the present time. The deepest producer in the North Dome at present is Kenda's No. 21-1P, which is producing from 8,997 feet. Unless something unforeseen develops, two additional producers should be finished in the North Dome before the close of September and these should be followed into production by two more shortly thereafter. The next two potential producers scheduled for early completion are the Kettleman North Dome Association's well No. 76-34Q and well No. 36-30J, both of which are within a few hundred feet of the projected completion depth.

Crude oil production showed a substantial increase in the Kettleman North Dome Field during the early part of the week due to the completion of the Associated's No. 3 Whepley, but this has subsequently been brought down to normal as the Associated started beaning back its new well within a few days subsequent to completion. The substantial production registered by No. 3 Whepley exceeded the most sanguine expectations of the Associated's field department. The North Kettleman Oil & Gas Co. is drilling ahead in a hard gray sand below the 8,400-foot level in No. 1 Lillis-Welch, but still has some distance to go before it reaches the critical stage. No. 1 Lillis-Welch, the most westerly well to be started in the Kettleman North Dome Field up to the present time, will bear watching during the course of the next several weeks, as developments during this time may indicate the possibility of developing commercial production. Approximately 3 miles due east of the North Kettleman Oil & Gas Co.'s No. 1 Lillis-Welch, Kettleman Acres, Inc., recently organized by O. H. Miller, J. L. Kinsella, P. E. Osborn, W. R. Webb, Charles Davenso and Michtel Macri, has acquired 20 acres in Section 16-21-17 and is attempting to negotiate for the drilling of a deep test at an early date. The location of this projected test is well out beyond the outer or blue line established by engineers as inclosing the potentially productive acreage, and is therefore a rank wildcat. With the exception of Kenda's well No. 58-20J, no production has been developed in the immediate area up to the present time. The 20 acres in question are located well off the trend of the axis and it will require some expert salesmanship to induce an operator to expend approximately $250,000 to drill a well on such a small tract, particularly when it is located so far from production. In the Middle Dome of Kettleman Hills, the Standard and Petroleum Securities are still being delayed with mechanical trouble but the Universal Consolidated is stepping right along with No. 1 Bunting, a potential producer located in Section 25-23-18.

Ventura Avenue

The Shell Oil Co. completed an excellent well in the Ventura Avenue Field during the past week when No. 73 Taylor was brought in under a natural flow doing 3,540 bbls. of 30.4 gravity oil and 1,600,000 feet of natural gas per day from 5,655 feet. No. 23 Taylor was bottomed at 5,889 feet, but was subsequently plugged back to the point mentioned and finished with an 8-inch oil string carrying 928 feet of perforated pipe. The Shell's latest completion was originally finished in the upper zone at 4,500 feet before being redrilled and deepened to its present depth. The Associated spudded in No. 26 V. L. & W. during the early part of the past week and is making preparations to start drilling operations on a new hole on the same property in the near future. The Associated is rigging up equipment in No. 1 Dabney Lloyd to facilitate abandonment of this project at 7,032 feet. No. 41 Lloyd was used as a gas injection well during the early part of the week but it failed to take excess natural gas from the Associated's No. 93 Lloyd, recently finished in the deep zone and may require further work. The Union Oil Co. has started preparations to resume drilling operations in No. 51 Newlove, which was recently given a preliminary production test at 3,450 feet. This project, located in the Santa Maria Field, pumped 150 bbls. of clean 25.1 gravity oil per day on the preliminary production test before being killed to deepen. The Union has also resumed work on No. 1 Folsom in this field and is at the present time cleaning out the hole at 3,365 feet. The Union Oil Co.'s operations in the Santa Maria Field are strictly a remedial measure and were undertaken primarily to rejuvenate that district and at the same time maintain employment for as many men as possible. The Union has been reconditioning wells in the Santa Maria district for

TANKER SHIPMENTS FROM LOS ANGELES TO DOMESTIC AND FOREIGN PORTS

	Aug. 20, 1932		Aug. 13, 1932			
	Total this week	Daily average	Total last week	Daily average	This year to date	Same time last year
Intercoastal-domestic—						
Diesel and gas oil	.....	.....	.....	.....	324,883	1,094,502
Gasoline	.....	.....	115,865	16,552	5,388,902	9,021,735
Kerosene	.....	.....	.....	.....	154,372	187,934
Foreign exports—						
Crude oil	153,305	21,901	69,098	9,871	5,318,171	4,883,702
Fuel oil	97,883	13,983	.....	.....	5,492,267	9,121,133
Diesel and gas oil	119,626	17,089	.....	.....	1,615,172	2,453,631
Gasoline	162,391	23,199	64,953	9,279	5,717,849	6,094,091
Kerosene	21,568	3,081	239,615	34,231	1,790,566	1,069,599
Lubricants	.....	.....	.....	.....	.....	36,353
Naphtha distillates	.....	.....	.....	.....	120,075	.....
Coastwise-domestic—						
Crude oil	248,634	35,519	324,112	46,302	9,358,016	14,553,725
Fuel oil	218,274	31,182	192,319	27,474	7,781,036	8,367,369
Diesel and gas oil	14,545	2,078	5,669	810	800,830	1,001,468
Gasoline	205,711	29,387	489,033	69,862	10,042,128	9,031,132
Kerosene	2,973	425	.....	.....	105,369	210,285
Naphtha distillates	.....	.....	.....	.....	.....	4,952

TANKER SHIPMENTS FROM SAN FRANCISCO TO DOMESTIC AND FOREIGN PORTS

Intercoastal-domestic—						
Diesel and gas oil	.....	.....	.....	.....	322,686	.....
Gasoline	.....	.....	.....	.....	578,391	591,439
Kerosene	75,760	10,823	.....	.....	75,760	.....
Lubricants	.....	.....	.....	.....	23,829	27,306
Foreign exports—						
Crude oil	.....	.....	.....	.....	707,651	107,736
Fuel oil	.....	.....	.....	.....	644,719	1,031,914
Diesel and gas oil	.....	.....	35,230	5,033	519,332	294,705
Gasoline	14,736	2,105	117,421	16,773	2,382,453	2,869,372
Kerosene	.....	.....	.....	.....	744,020	548,188
Lubricants	5,160	737	.....	.....	30,094	20,100
Coastwise-domestic—						
Fuel oil	103,760	14,823	55,085	7,869	1,975,815	2,599,599
Diesel and gas oil	4,997	714	.....	.....	243,091	279,670
Gasoline	.....	.....	103,532	14,790	2,391,138	2,613,261
Kerosene	.....	.....	.....	.....	80,467	224,140
Naphtha distillates	.....	.....	.....	.....	.....	49,780

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the past two years and will probably continue this corrective work for an indefinite period. Many of the wells in this district, drilled over 25 years ago, were inefficient producers due to corroded casings and other difficulties resulting from old age. Most of the Union's properties in the Santa Maria Field have been shut down since 1926 and consequently required attention, particularly with respect to cement jobs, some of which have deteriorated during the period in question. The company's efficient production department, under the direction of Frank F. Hill and A. C. Rubel, has been looking to the future both with respect to efficiency of operation and the desirability of maintaining commercial production in the Santa Maria area. With this idea in mind, the company has been repressuring its various zones during the past two years. The Union Oil Co. long ago recognized the advisability of repressuring partially depleted zones and was the first to employ this means of rejuvenation in California. The cumulative result of this constructive work will become manifest in later years.

Elwood

Caroline Spalding finished an exceptionally good well in Santa Barbara County during the latter part of the current week when well No. 6 on tideland permit No. 93 came in under a natural flow doing 1,130 bbls. of clean 32.3 gravity oil per day from 3,590 feet. The substantial production registered by this well was somewhat of a surprise as other wells in the immediate vicinity have been consistently declining for several months. The Pacific Western Oil Co. has concluded drilling operations on well No. 9, located on state tideland permit No. 92, at 3,746 feet, but this project has not yet responded to swabbing operations. The Pacific Western's potential producer in the Elwood Field has been classified as a jinx well because of an expected explosion and fire a few weeks ago. This explosion, which occurred when gas became ignited in the cellar during swabbing operations, killed one member of the crew, burned another and damaged the machinery and equipment and resulted in delayed operations. In the Santa Barbara Mesa Field of Santa Barbara County, Owens & Pugh recently spudded in a test in Section 27-4-27. In the Rincon Field, Robinson & Roberts have started construction of an isolated pier located out in the open ocean for the Indian Petroleum Co., which contemplates drilling a well on tideland permit No. 82. This pier is to be constructed without a connecting link to the shore line and will be virtually an island so arranged that it will provide a sump hole and sufficient room for all other necessary rotary equipment. This lease adjoins the Honolulu Consolidated Oil Co.'s tideland permit No. 56. The Honolulu, incidentally, is rotating ahead in well No. 2 on tideland permit No. 56 at 3,002 feet.

The Western Gulf Oil Co. has not yet recovered from the complicated fishing job which has been holding up progress in No. 1 Bradley, the deepest well to be drilled in California up to the present time, and the outlook is not any too promising for an early recovery. This well, located in the Santa Maria district of Santa Barbara County in Section 5-9-33, was bottomed at 10,294 feet before the mechanical troubles developed. The Standard Oil Co. is rotating ahead in its wildcat on Santa Rosa Island at 2,950 feet and, while nothing of importance has been logged up to the present time, this well may still result in commercial production. The geological formation penetrated has not been definitely determined, although the limited data available indicates the possibility that this wildcat is drilling ahead in Eocene rocks. The Casitas Oil Co. is making fairly good footage on the pier which it is building to facilitate drilling operations in the Carpinteria section of Santa Barbara County, but it will probably be another several weeks before drilling operations get under way. The Oakburn Oil Co. has resumed drilling operations in No. 1 Sperry, a tideland project located on state permit No. 169, and the hole is being cleaned out preparatory to the well being put on the beam.

Lost Hills-Belridge

The Union Oil Co. successfully recompleted No. 17 Belridge in the North Belridge Field of Kern County after cleaning out the hole to 5,604 feet, and has returned it to production, flowing 122 bbls. of exceptionally clean 39.1 gravity oil per day from 5,604 feet. This well was originally finished with a 3-inch liner, but upon being reconditioned the hole was finished with a 4¾-inch liner carrying 215 feet of perforated pipe. The Continental Oil Co. is making good footage in No. 3 Result, a new well recently started in the North Belridge Field, but it will be another month or six weeks before it reaches the interesting stage. Drilling operations have shown a slight increase in the North Belridge Field during the past few weeks, but this merely reflects the fulfillment of drilling requirements and does not indicate the initiation of competitive drilling. Development work in the Fruitvale Field has shown a declining tendency and indications point to a lower amount of drilling during the next few months. This deduction is made in spite of the fact that several new wells are being rigged up for early work. The rather unsuccessful outcome of drilling operations in the western end of the Fruitvale Field is expected to slow down development in the immediate area, although in other and more favorable parts of the field fairly substantial production can still be developed. The Standard Oil

IMPORTANT NORTHERN CALIFORNIA WILDCATS

Company, well and location—	S.T.R.	Depth	Status
Standard, No. 1 Santa Rosa Island, Santa Barbara Co.	unsurveyed	2,960	gr. sd. drilling
Barnsdall, No. 1 Los Alamos, Santa Barbara County	31- 8-33	5,331	recemented
Western Gulf, No. 1 Santa Maria, Santa Barbara Co.	5- 9 33	10,294	fishing D/P
Wilson, N. S., No. 1 Los Alamos, Santa Barbara Co.	2- 7-35	4,979	suspended
Equity Oil Co., No. 1 Coal Oil Point, Santa Barbara Co.	24- 4-29	3,750	lr. sh. drilling
Bolsa Chica, No. 1 Coal Oil Point, Santa Barbara Co.	25- 4-29	5,510	redrilling
Deuel & Associates, No. 1 Naples, Santa Barbara Co.	7- 4-29	5,124	cleaning out
Oakburn Oil Co., No. 1 Capitan, Santa Barbara Co.	tideland	2,821	pump. test
Pacific Western, No. 1 Gibraltar, Santa Barbara Co.	14- 5-27	2,345	suspended
Casitas Oil Co., No. 1 Carpinteria, Santa Barbara Co.	tideland	....	building pier
Cuyama Oil Co., No. 1 Cuyama, Santa Barbara Co.	12-10-27	301	sd. drilling
Associated, No. 1 Rincon Creek, Ventura Co.	19- 4-24	2,080	suspended
Woodrow Pet., No. 1 Rincon, Ventura Co.	4- 3-24	4,202	sd. sh. drilling
Indian Pet., No. 1 Rincon, Ventura Co.	tideland	....	building pier
Miller, J. W., No. 1 Miguelito, Ventura Co.	23- 3-24	....	material
Wilshire Oil Co., No. 1 Sulphur Mountain, Ventura Co.	20- 4-21	100	tech. spud
Superior Oil Co., No. 1 Timber Canyon, Ventura Co.	13- 4-21	3,416	cemented
American Oil Co., No. 1 Conejo, Ventura Co.	33- 2-20	2,050	cleaning out
Hay Petroleum, No. 1 Weed Patch, Kern Co.	23-30-29	....	location
Wilshire Oil Co., No. 1-A Buttonwillow, Kern Co.	7-29-24	7,000	suspended
General Pet., No. 2 Buttonwillow, Kern Co.	6-28-23	rig	rigging up
Millham Exploration, No. 18 Buttonwillow, Kern Co.	17-28-23	mtl.	building rig
Turman, T. E., No. 1 McKittrick, Kern Co.	22-29-21	4,610	suspended
Welport Oil Co., No. 2 McKittrick, Kern Co.	19-29-21	639	br. sh. drilling
General Pet., No. 1 Belridge, Kern Co.	30-28-21	8,260	suspended
Wallace, K. C., No. 1 Belridge, Kern Co.	32-29-21	4,222	suspended
Rio Cal Pet., No. 1 Shale Hills, Kern Co.	2-27-18	2,355	suspended
Cumberland Oil Co., No. 2 Devils Den, Kern Co.	17-26-18	3,225	cleaning out
Hollaway, A. S., No. 1 Devils Den, Kern Co.	11-25-18	500	sd. sh. drilling
Hannah, Tom, No. 1 Devils Den, Kern Co.	25-25-18	3,516	cleaning out
Pyramid Hills Oil Co., No. 1 Devils Den, Kern Co.	24-25-18	1,724	testing
Fowler, F., No. 1 Blackwell Corner, Kern Co.	15-26-19	3,170	suspended
Regina Oil Corp., No. 1 Mojave, Kern Co.	26-10-14	3,150	hd. sd. drilling
Harding, J. B., No. 1 Mojave, Kern Co.	5-10-10	1,030	redrilling
Ritchie, J. J., No. 1 Tejon, Kern Co.	33-11-19	6,025	suspended
Descanso Oil Co., No. 1 Tejon, Kern Co.	31-11-19	2,749	suspended
Kingsburg Expl. Co., No. 1 Kingsburg, Fresno Co.	30-16-23	2,970	suspended
Kent & McDonald, No. 1 Carrizo Plains, S. Luis Obispo Co.	3-32-22	2,693	suspended
Emerich Oil Co., No. 1 Carrizo Plains, San Luis Obispo Co.	22-32-22	1,841	cleaning out
Trav-El Oil Co., No. 1 Carrizo Plains, San Luis Obispo Co.	7-32-22	2,450	suspended
Indian Dome Oil Co., No. 1 Edna, San Luis Obispo Co.	26-31-12	3,352	suspended
Martin, J. D., No. 3 Edna, San Luis Obispo Co.	5-31-13	411	sd. sh. drilling
Paso Robles Oil Co., No. 1 Edna, San Luis Obispo Co.	27-27-11	4,191	suspended
Schilling, C., No. 1 Atascadero, San Luis Obispo Co.	1-29-12	1,650	suspended
Shell, No. 1 San Miguel, San Luis Obispo Co.	4-26-12	1,030	sd. sh. drilling
Pacific Inland, Well No. 1, Monterey Co.	19-23-15	2,441	cleaning out
Brown, W. F., No. 1 Parkfield, Monterey Co.	15-23-14	1,051	suspended
Thomas Pet. Co., No. 1 Parkfield, Monterey Co.	31-22-14	198	suspended
Guess, E. B., No. 1 Corcoran, Kings Co.	7-21-21	6,197	suspended
Woodward, Glen, No. 1 Dudley Ridge, Kings Co.	32-22-20	775	cemented
Scott Bros. Drlg. Co., No. 1 Dudley Ridge, Kings Co.	18-22-19	1,843	suspended
Lacal Natural Gas Co., No. 1 Dudley Ridge, Kings Co.	32-22-20	341	suspended
Kettleman Natural Gas Co., No. 1 Dudley Ridge, Kings Co.	18-22-19	1,100	suspended
Irma Investment Co., No. 3 Dudley Ridge, Kings Co.	7-23-20	1,224	suspended
Triume Oil Co., No. 1 Dudley Ridge, Kings Co.	5-23-20	1,098	cemented
Dudley Dome Oil Co., No. 1 Dudley Ridge, Kings Co.	9-23-20	rig	suspended
Eagle Oil Co., No. 2 Dudley Ridge, Kings Co.	15-23-20	1,342	suspended
Knudsen & Schmidt, No. 1 Reef Ridge, Kings Co.	36-23-17	5,694	fishing
Kettleman Ridge Oil Co., No. 1 Avenal, Kings Co.	10-23-16	1,148	pump test
Kettleman Ridge Oil Co., No. 2 Avenal, Kings Co.	10-23-16	mtl.	building rig
Magee & Stone, No. 1 Alpaugh, Kings Co.	34-24-22	5,060	suspended
Guess, E. B., No. 2 Dudley Ridge, Kings Co.	12-23-22	1,840	suspended
Ducor Pet. Co., No. 1 Ducor, Tulare Co.	14-24-27	2,200	suspended
Inland Valley Oil Co., No. 1 Visalia, Tulare Co.	24-17-24	2,092	suspended
Sheldon & Gholson, No. 1 Porterville, Tulare Co.	34-22-27	899	cemented
Hayman Oil Co., No. 1 Porterville, Tulare Co.	17-23-28	380	suspended
Ellis & Sanford, No. 1 Tulare Lake, Tulare Co.	20-24-23	1,490	suspended
Napa Oil Co., No. 1 Griffith, Napa Co.	7- 8-3	3,055	sd. sh. drilling
Oakdale Oil Co., No. 1 Oakdale, Stanislaus Co.	5- 2-10	4,800	sd. sh. drilling
Hilderbrandt, R., No. 1 Crows Landing, Stanislaus Co.	36- 6-7	1,130	suspended
Rushing Oil Co., No. 1 Waterford, Stanislaus Co.	20- 3-13	2,632	sd. sh. drilling
Pacific Northern Oil Co., No. 1 Guinda, Yolo County	23-12-3	3,045	suspended
Easton & Monell, No. 1 Colma, San Mateo Co.	25- 3-6	3,130	suspended
Bergman, Harry, No. 1 Dos Palos, Merced Co.	12-12-11	....	material
Los Banos Pet., No. 1 Los Banos, Merced Co.	26-10-9	....	material

IMPORTANT SOUTHERN CALIFORNIA WILDCATS

Company, well and location—	S.T.R.	Depth	Status
Hines Pet., No. 1 Ocean Park, Los Angeles Co.	9- 2-15	7,414	set pipe
Taylor Oil Co., No. 1 Culver, Los Angeles Co.	12- 2-15	6,238	suspended
Co-operative Dev. Co., No. 1 Del Rey, Los Angeles Co.	26- 2-15	4,593	sd. sh. drilling
Palm Ridge Oil Co., No. 1 Palms, Los Angeles Co.	2- 2-15	mtl.	building rig
Hogan, N. S., No. 1 Hawthorne, Los Angeles Co.	23- 3-14	101	suspended
Lawndale Pioneers, Inc.'s No. 1 Peck, Los Angeles Co.	20- 3-14	6,378	suspended
Baldwin Oil Co., No. 9 Inglewood, Los Angeles Co.	7- 2-14	5,430	sd. sh. drilling
Baldwin Hills Synd., No. 1 Inglewood, Los Angeles Co.	17- 2-14	4,090	suspended
Kyle, W. A., No. 1 Inglewood, Los Angeles Co.	7- 2-14	4,318	suspended
Pacific Western, No. 16 Inglewood, Los Angeles Co.	8- 2-14	2,900	suspended
El Dorado Oil Co., No. 1 Puente, Los Angeles Co.	30- 2-9	2,860	suspended
Jones, W. L., No. 1 Bell, Los Angeles Co.	31- 2-12	1,593	suspended
Blinn & Gray, No. 1 Montebello, Los Angeles Co.	6- 2-11	5,060	suspended
McNeil, A. W., No. 1 Montebello, Los Angeles Co.	7- 2-11	rig	suspended
Yellowstone Oil Co., No. 1 Alhambra, Los Angeles Co.	24- 1-13	3,919	suspended
Caballero Estates, No. 1 Calabasas, Los Angeles Co.	23- 1-16	1,604	suspended
Marble, Willard, No. 1 Chatsworth, Los Angeles Co.	6- 2-16	1,395	suspended
Ball, W. T., No. 1 Newhall, Los Angeles Co.	34- 3-16	3,283	gr. sd. drilling
Ajax Pet., No. 1 Newport, Orange Co.	21- 6-10	7,259	suspended
Nuoil Co., No. 1 Newport, Orange Co.	29- 6-10	1,970	suspended
Mineral Exploration, No. 1 Capistrano, Orange Co.	8- 8-7	2,406	sd. sh. drilling
Orangethorpe Pet., No. 1 Brea, Orange Co.	32- 3-10	4,528	fishing D/P
Spindletop Oil Co., No. 1 Salton Sea, Riverside Co.	25- 7-10	3,590	suspended
Duncan, N. L., No. 1 Sagebrush, Riverside Co.	8- 4-6	1,157	suspended
Colan Dev. Co., No. 1 Redlands, San Bernardino Co.	25- 1-2	2,392	suspended
Great American Pet., No. 1 Chino, San Bernardino Co.	18- 2-8	....	material
Mason Oil Co., No. 1 Salton Sea, Imperial Co.	1-17-15	676	sd. sh. drilling
Woods, D. H., No. 1 Salton Sea, Imperial Co.	7-11-16	769	sd. sh. drilling
Borderland Oil Co., No. 2 Encinitas, San Diego Co.	29-16-4	2,677	suspended
South Bay Oil Co., No. 1 Border, San Diego Co.	31-18-3	1,243	suspended
Shannon, G. H., No. 1 Kearney, San Diego Co.	14-15-3	446	suspended

Co. has resumed drilling operations in No. 1 Mascot, a deep test located in the Midway-Sunset Field of Kern County, and drilling will be resumed to 9,629 feet. The Standard has not made any additional hole since resuming work on this well on July 1, following a suspension of approximately 18 months but is expected to start drilling ahead shortly. A production test conducted upon the resumption of work a month or so ago was unsuccessful and is directly responsible for the decision to drill ahead.

Two new wells are being started in the Buttonwillow gas field of Kern County, but this slight increase in development following a decline in drilling during the past several weeks does not indicate any deviation from the conservative work undertaken by operators in this field. The General Petroleum has just about completed rig construction for a second test to be drilled on the Morris property in Section 6-28-23, and the bit in this well should begin making hole shortly. General Petroleum's No. 1 Morris was originally finished as a commercial gas producer over a year ago but the company has been unable to revive it and may ultimately find it necessary to abandon the original test. The Milham Exploration Co., in addition to reconditioning No. 1 Crites and No. 1 Page, is making preparations to spud in No. 41, a new well located on property leased from the Southern Pacific Land Co. The Devils Den area reflects a revival of interest with the result that there are four wells making hole in this area at the present time. The Barnsdall Oil Co. was recently granted a 90-day extension on its Kern County Land Co. lease in the Wheeler Ridge district, located in the extreme southern part of the San Joaquin Valley, and the company's geological department is resurveying the area to determine the advisability of conducting further exploration work and at the same time decide the location for the second well if this additional work is justified.

Inglewood

The Lloyd Corp., having purchased the Rubel lease in the Inglewood Field of Los Angeles Basin, has cleared up a matter of considerable importance and in doing so has clarified the situation with respect to deep zone development in this field. It looked for a few weeks like the situation at Inglewood would get beyond control due to the insistence of the Rubel interests that the Pacific Western Oil Co. prosecute deep zone development in order to prevent further drainage of the property in question. The Rubel interests were of the opinion that the Shell Oil Co. had unintentionally drained the Rubel lease to the extent of over 1,000,000 bbls. and were insistent that retaliatory drill-be immediately instituted. In accordance with this demand the Pacific Western Oil Co. drilled No. 16 Rubel down into the second zone and would have concluded a production test if negotiations between the Lloyd Corp. and the Rubel interests had not been concluded in the meantime. It is quite obvious that if No. 16 Rubel was put on production in the second zone, other operators would have found it necessary to drill offsets with the result that the curtailment program would have become a thing of the past. In order to preclude the necessity of extensive deep zone exploitation, the Shell Oil Co. plugged back No. 9 Rindge to 2,848 feet and suspended operations. This project is the well which precipitated the discussion over deep zone exploitation in the Inglewood Field. E. F. Hammel completed his well No. 1 in the Playa Del Rey Field of Los Angeles Basin during the early part of the past week, but this project, bottomed at 6,154 feet and finished with a 4¾-inch liner carrying 495 feet of perforated, was only good for 73 bbls. of 22.8 gravity oil per day. The Union Oil Co. has staked location for a new well to be drilled on the Vidor property located in the extreme eastern part of the Playa Del Rel Field, and rig construction is expected to get under way some time during the course of the next week or 10 days. This new work is due to lease requirements and not because of any desire on the part of the company to stimulate production. Due to its location, the Union will subsequently be required to start an additional well on the Del Rey lease, which adjoins the Vidor property on the west.

Southwest Texas Fields

(Continued from Page 58)

in eastern Bexar County just south of the Randolph Field, is one of the most interesting tests in Southwest Texas for the reason that it is near an old well drilled in 1878 that drilled through 40 feet of salt at 640 feet, and it is believed that there is a salt dome there. If so, it is far west of the beaten path of salt domes.

One of the interesting features about the old well is that it is finished with iron pipe and the iron casing is sticking up out of the hole. Old timers say they haven't seen iron casing for so long that they can scarce remember when. The casing is in good state of preservation. The old well drilled in 1878 made enough oil at lower depth to supply the farmers for many miles around with oil, a fact substantiated by residents now living near the well. It made oil for 10 or 15 years. Hill's location is about 1,000 feet west of the old well. The eastern edge of the Navarro formation is about in the vicinity of the new Hill test overlying the Taylor marl, which gradually thins out to the west.

Mr. Hill has a big block of acreage around the well.

Miscellaneous

Magnolia Pipe Line Co. connected with the C. J. Webster Oil & Gas Co.'s No. 1-A McCrory, the discovery well of a new pool in Caldwell County, completed a few weeks ago, and ran the first 1,000 bbls. from storage the past week. The Magnolia will take 75 bbls. of oil a day from the well, which has been pinched down and most of the time since it was completed has been shut in waiting for pipe line connection.

Awards Are Given for Ideas on Refinery Improvements

NEW YORK, Sept. 3.—Tide Water Oil Co., through its "suggestions committee," has just made 14 additional awards to workers at its Bayonne refinery for suggestions for improving plant operations.

Joe Smith at the coils was awarded $15 for a group of suggestions, all tending to improve operation conditions on the coils.

Patrick Kierman, also at the coils, was awarded $3 for suggesting the installation of a guard on controller handles on feed pumps.

Joe Bilics of the plate shop was awarded $5 for development of a jigg for holding return header on new coils.

Steve O'Brien, of yard No. 1, was awarded $10 for suggesting installation of a 6-inch line from discharge on manifold of still charging pump up to gas oil line to the hill at No. 27 cooler.

Walter Eley, also of yard No. 1, likewise received a $10 award for the idea of connecting No. 50 reflux line to No. 51 reflux line, which improved conditions.

Charles Northey and Roy LaPoint, of the coils, were awarded $5 each for recommending the installation of certain bypass lines.

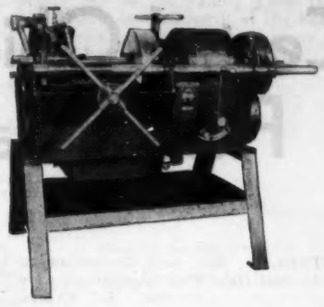
Frank Gardlan was awarded $7.50 for suggesting a short connection from bottom line ahead of the cooler to side stream coil in cooler and another in manifold room from side stream outlet to bottom outlet on No. 1 lube unit.

William Kellner of the press plant was awarded $2 for suggesting the replacement of the iron doors at the centrifuge plant with reinforced asbestos doors with copper or brass bindings.

ALABAMA TO TAX GAS

A bill has been introduced at the special session of the Alabama legislature to levy a tax of 2 cents per 1,000 feet on natural gas, and another would regulate merchandising activities of public utilities.

UNHEARD OF SAVINGS—



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Central Ohio Most Active of the Central West Fields in a Week of Few Completed Wells

By GEORGE A. WHITNEY
Staff Correspondent, Central West Fields

FINDLAY, Ohio, Sept. 3.—Outside of the Central Ohio Field completions were few in Central West division in the field reports received in the past week, and no unusual wells were brought in in Central or Northwestern Ohio, Indiana, Illinois or Kentucky.

In the Lima Field of Northwestern Ohio, only two completions were announced, one a producer and the other a dry hole. The dry hole was drilled by Jones & Coil on the J. Wolf farm, Section 19, Loudon Township, Seneca County, the Trenton being topped at 1,292 feet and drilled in to a total depth of 1,652 feet. Green and others (G. W. Ackerman and others) are shut down at 1,531 feet in No. 1 Mary McElhany farm, Section 15, Hopewell Township, same county. Murphy & Sons are drilling No. 2 J. G. Bihn farm, Section 11, same township, and McPheron and others have a rig in for No. 4 Frank Fox farm, same section.

C. A. and F. J. Peavey are drilling a test on the P. C. Yant farm, Section 25, Monroe Township, Allen County, and recently drilled in a 5-bbl. pumper in No. 6 on the C. A. Hover farm, Section 24, Bath Township, same county.

Adrain Tester is drilling No. 3 Harry J. Honold, Section 34, Moulton Township, Auglaize County. Masters Oil & Gas Co., drilling a second test on the Adam Hoening farm, Section 19, Gibson Township, Mercer County, and O. G. Sellers is shut down at his test on the A. Rindler farm, Section 21, Granville Township, same county.

O'Brien and others' test on the C. J. Rice farm, Section 17, Ballville Township, Sandusky County, struck a flash of gas at 1,568 feet at 163 feet in the Trenton, but unless drilled deeper to increase the gas output will be of little value.

Simms Oil & Gas Co. is drilling a test on the L. A. Cook farm, on Lot 9,975, Rush Creek Township, Logan County. Brown and others are putting down a test on the Joseph Eckert farm, Section 20, Tymochtee Township, Wyandot County, and the Upper Sandusky Oil & Gas Co. is drilling a test on the C. N. Hildebrand farm, Section 28, Crane Township, same county. Harpster and others are shut down at 1,350 feet in a test on the L. G. Beis farm, Section 11, Crawford Township, same county.

William Wilt, trustee, is drilling a test on the Herschel Beatty farm, Section 18, Allen Township, Darke County. E. J. Davis and others are drilling a test on the Charles B. Holloway farm, west of Toledo, in Section 7, Monclova Township, Lucas County.

INDIANA FIELDS

No completions were reported from any part of the Indiana Field during the past week. The Wabash Public Service Co. is drilling No. 4 on the G. B. Allen farm, Section 22, Columbia Township, Gibson County, and Tressler, Moore and others are drilling a test on the Mary McCarn farm, Section 18, Washington Township, Pike County.

Southern Development Co. is shut down in the Upper Trenton limestone formation in a test on the Ira North lot, in Rising Sun Township, Ohio County, and is hunting for gas. C. W. Reichard and others are also looking for gas in a test on the Fred A. Cleveland farm in the NE of Section 30, Orangeville Township, Orange County, and are now shut down at a depth of 1,850 feet.

A. R. Morris and others are reported shut down at 1,600 feet in No. 1 on the H. B. Brown farm, near Lyons, in Greene County, and are drilling No. 2 on the same farm.

CENTRAL OHIO FIELDS

Thirteen completions were reported for the past week from the Central Ohio Field, of which two were oil wells with initial production 20 bbls., four were gas wells and seven were dry holes, scattered over seven counties.

In the Chatham Field of Medina County the Oko Oil & Gas Co.'s No. 20 on the L. A. Watson farm, Section 3, Chatham Township, was a dry hole, there being no Berea sand showing, while No. 21, same farm, produced 5 bbls. initial from 311-63 feet. Curtis A. Eaken's No. 7 Thomas Brown farm, Lot 22, same township, also failed to find any Berea sand and is a dry hole. In Harrisville Township, same county, Barnhart and others' No. 5 on the W. P. White farm, Lot 17, produced an initial of 15 bbls. from the Berea sand from 410-76 feet.

In Fairfield County, Pleasants Township, the City Natural Gas Works' No. 3 Birdie Clump farm, Section 23, is a gas well, at a total depth of 2,365 feet, which is the Clinton lime formation. Same company is drilling No. 2 on the Albert Brannum farm, Section 35, Berne Township, same county.

In Licking County, Fallsburg Township, Williams and others' No. 2 on the Ed A. Divan farm, Section 23, was a dry hole from 624-34 feet. The Wehrle Gas Co. has a light gas well on the A. F. Wehrle and others' farm, in Lot 3, Hopewell Township, from 3,137-77 feet.

In Stark County, Jackson Township, the Medford Oil & Gas Co.'s No. 2 on the Whitmyre heirs farm, Section 5, is a fair gas well in the Clinton at a total depth of 4,223 feet. Kime and others' second test on the Charles Oberlin farm, Section 10, same township, is reported a dry hole at 4,196 feet. East Ohio Gas Co. is drilling No. 1 Ruth Grant farm,

(Continued on Next Page)

Amity, Washington County, Pennsylvania, Has Another Good Producer in Deep Sand

By STAFF CORRESPONDENT

PITTSBURGH, Pa., Sept. 3.—In Southwest Pennsylvania another good well was brought in in the new pool near Amity, between Pancake and Laboratory, in Amwell Township, Washington County. It was the second test of Raymond Orrill & Co. on the G. L. Walker farm and is rated for 40 bbls. a day initial from the Fifth sand at a depth of 2,976 feet. This is the fourth fair well in this new section. No. 1 Walker continues to be a fair producer, the same operators' test on the Mary Haslett is still holding up, and the Union Gasoline & Oil Corp.'s test on the Mary B. Lindley still produces about 100 bbls. a day. Raymond Orrill & Co. are building a rig for a second test on the Mary Haslett farm.

A typical log of the district is furnished by the well record of No. 1 G. L. Walker. The Waynesburg Coal was found at 450 feet; Pittsburgh Coal, 774-780; the Murphy sand, 964-1,005; Red Rock, 1,040-1,054; Little Dunkard, 1,154-1,193; Big Dunkard, 1,319-1,351; Gas sand, 1,464-1,500; sand, 1,642-1,685; Salt sand, 1,692; water, 1,790-1,805; Big lime, 1,863-1,911; Big Injun, 1,911-2,155; show of gas, 1,981; Squaw sand, 2,200-2,250; 30-foot shells, 2,455-2,535; Gantz sand, 2,604-2,643; Fifty-foot sand, 2,659-2,697; water, 2,655; Thirty-foot, 2,741-2,758; little show of gas and some oil, 2,745; Gordon stray, 2,808-2,885; Fourth sand, 2,900-2,933; Fifth sand, 2,958; oil, 2,965-2,980. The total depth of the well was 2,983 feet. The well was started with 803 feet of 10-inch casing, followed by 1,545 feet of 8¼-inch, 1,941 feet of 6⅝-inch and 2,668 feet 9 inches of 5⅛-inch casing followed. Two-inch tubing was used to the depth of the well, and the 10-inch and 8¼-inch pipe was all pulled.

Completions in the other parts of the Eastern Field continue dull with few completions. A total of eight wells and two dry holes summarizes the work. The producing wells were equally divided, four gassers and four oil wells, with an initial production of 72 bbls.

SOUTHEAST OHIO

In southeastern Ohio only four wells were completed during the past week, two of which were dry holes. The only oil producer was the test of the Frazeyburg Rex Oil & Gas Co. on the John Whitacre farm in Section 4, Ludlow Township, Washington County. It was drilled in the Injun sand, and to a depth of 1,306 feet, and produced 10 bbls. naturally the first day. After a shot the hole filled up 500 feet in three hours and it is rated for about a 15-bbl. a day producer.

In Licking County the Wehrle Co. drilled a test on its property owned in feet in the NE of Section 3, Hopewell Township. It was drilled into the Clinton sand and is a light gas well, about 25,000 feet a day, with no showing of oil.

In Morgan County, 1 mile west of Morganville, in Section 3, Union Township, R. C. Whitener drilled a second test on the S. L. and Joseph Finley farm through the First Cow Run sand, a depth of 192 feet, and found it dry. In Washington County, O. J. Gabbert drilled a test on the Clyde Ackison farm at the mouth of Newells Run in Section 10, Newport Township. It went to a depth of 366 feet, through the First Cow Run sand, and was likewise a dry hole.

WEST VIRGINIA

Two producers and three gas wells were completed in West Virginia during the past week. The larger of the two producers was on the proven lease of the Pure Oil Co. on the Williams Coal Co. tract in Sherman district, Boone County. It was the Pure Oil Co.'s No. 258 and was drilled in the Berea sand at a depth of 3,062 feet. It is rated good for 15 bbls. a day. The other producer was No. 3 of the Wurtz Brothers, formerly Snider & Pense, on the Joseph Satterfield farm in Mannington district, Marion County. It was drilled deeper to 3,169 feet and will make a small oil well.

Gas Wells

In Cabell County the Empire State Gas Co. completed a test on the C. C. McCoy farm in McComas district at 1,484 feet in the Salt sand. It will make a gas well rated at 250,000 feet a day.

In Marion County two gas wells were completed. In Battelle district the West Penn Gas Corp. completed a test on the Wood Kimble farm in the Gordon sand at 3,072 feet. It is rated as a small gas well. In Mannington district, Monroe and Laughlin completed a second test on the D. V. Liming farm and have a gas well from the Bayard sand at a depth of 3,624 feet.

Drilling in West Virginia

In Pleasants County, Albert Neeley is drilling a test on the Smiley Wagner farm in Union district which has reached a depth of 1,350 feet, and has made a location for a second well on the R. E. Amos farm. In the same district, L. C. White & Co. are down 1,850 feet in a second test on the State farm. In Grant district, M. C. Martin, Jr., is drilling No. 24 on the M. C. Nye farm. In McKim district, T. L. Shop is shut down at 400 feet in a test on the Jacob Cox farm, pending court action.

In Ritchie County the King Knob Oil & Gas Co. is drilling a test on the Albert Carpenter farm in Murphy district, which has reached a depth of 465 feet. In Grant district, J. W. Roberts, Jr., is in the sand in his No. 3 on the H. B. Perrine farm.

In Doddridge County the Yeater Oil & Gas Co. has completed a rig for No. 2 W. W. Spencer in Grant district. In Hancock County, Charles Spriggs is shut down at 2,490 feet in a test on the W. L. Smith farm in Clay district. In the same district Joseph Crago has reached a depth of 2,340 feet in No. 5 on the George R., Charles and James Crago farm. In Grant district the R. J. Bradin Co. is drilling No. 13 on the J. C. Hamilton farm and has reached 950 feet.

In Wayne County the Southern West Virginia Gas Co. is down for water at 1,450 feet in a test on the A. W. Preston farm in Union district. In Lincoln County C. McGhee and others have reached 1,250 feet in a test on the A. L. Mullens farm in Jefferson district. In Union district, the Woodall Gas Co. has their No. 3 on the James Walker Adkins farm, drilling at 1,050 feet. R. H. Adkins and others have made a location for a second test on the Gloza Bragg farm, same district.

In Wirt County, Glen Roberts is drilling at 500 feet in a test on the G. W. Roberts farm in Burning Springs district. In the same district, Paul Roberts is down 800 feet in a test on the Hall and Ackley lease. In Clay district, Baker & Bryan are drilling a test on D. P. Hig-

gins farm which has reached 700 feet.

In Wetzel County the State Line Oil & Gas Co. has reached 1,000 feet in a test on the Emma M. Kirkhart farm in Church district. In the same district, Null & Moorehead are down 1,500 feet in No. 4 on the W. G. Snodgrass farm. In Wood County the Crowley and Carr Oil Co. have moved a machine in on the B. F. Mayo farm in Williams district for a test on that farm.

In Roane County, Bowser & Jackson have reached 1,625 feet in a test on the Smith & Chewning farm in Smithfield district. In Curtis district the Reedy Oil & Gas Co. are drilling at 700 feet in a test on the E. S. Guthrie farm. The Snyder Brothers and others are shut down at 1,972 feet in a test on the C. C. Guthrie farm, same district, and the Big Four Drilling Co. shut down at 1,780 feet in its test on the H. C. Cottle farm. In Jackson County, H. H. Cheppard and others are also shut down in their test on the T. C. Burdette farm in Washington district, after reaching a depth of 680 feet.

SOUTHWEST PENNSYLVANIA

No other completions than the one in Amwell Township mentioned above were completed in Southwest Pennsylvania during the past week. With a 70 per cent allowable production in effect for the month of September, many wells which had been drilling have shut down until some improvement in conditions is evident. In Washington County, Bromley and Bungard have reached 909 feet in a test on the J. D. Clark farm in South Franklin Township. In Hanover Township, Rendall & Co. have a test drilling on the Mrs. Arnold farm. In the same district the test of C. Ferguson & Co. on the Pittsburgh Coal Co. tract has shut down temporarily. In South Franklin Township, Allegheny County, Reiley and others have started drilling a test on the Reiley heirs farm.

Depths of the Wildcats

In Pennsylvania the Plymouth Oil Co. reached a depth of 2,420 feet, drilling in slate and shells, on the John E. DuBois farm in Sandy Township, Clearfield County. Work was halted for engine repairs. This test is scheduled for the Driftwood anticline, a depth of about 3,000 feet.

In Southeast Ohio the test of E. E. Grimm and Benedum & Trees on the E. E. Knowlton farm in Section 10, Independence Township, Washington County, has reached a depth of 4,910 feet drilling in dark sand. So far no production has been met.

In Virginia the test of Benedum & Trees on the Clinchfield Coal Co. property in Russell County has reached a depth of 2,020 feet and at present is shut down cementing a cave. In Wise County the same operators' test on the I. Kaufman farm reached a depth of 1,770 feet and shut down again with a second fishing job. In Buchanan County the Davis Elkins and others' test on the Smith farm is shut down at 5,610 feet, fishing for the bailer. Brehn & Co. remain shut down at 2,440 feet in a test on the J. M. Arnold farm in Washington County.

In West Virginia the Benedum & Trees test on the Pocohontas Coal Co. property in McDowell County, has reached a depth of 4,850 feet and is drilling in slate and hard lime.

Central West Fields

(Continued from Preceding Page)

Section 24, Jackson Township. Same company has rigs in for No. 1 F. T. Hinkle farm, Section 12, and No. 3 on the George H. Charles farm, and a location made for a test on the Frank S. Seil farm, Section 24, Jackson Township. Brendall and others have a rig in for No. 3 Charles Yearkey farm, Section 21, same township, and White and others are drilling a test on the Wern L. Snyder farm, Section 12, same township. W. F. Shetler is shut down at 2,975 feet in a test on the A. L. Funk farm, Section 22, same township.

In Belmont County, Kirkwood Township, Bradfield and others have a dry hole in a test on the Margaret Campbell farm, Section 2, in the Berea sand from 1,777 feet. H. D. Crouch and others made a location for a test on the H. E. and I. C. Kaiser farm, Section 21, and also for a test on the Boyd and Mayors farm, Section 26, same township. Oko Oil & Gas Co. is drilling a test on the W. M. and Cora Simpson farm, Section 20, Union Township, same county.

In Guernsey County, C. G. Wherton drilled a dry hole in a second test on the P. and J. Kecherha farm, Section 8, Westland Township, there being no sand found at 740 feet. Ohio Fuel Gas Co. reports a dry hole in No. 2 on the Cora Brown and others farm, Section 3, Wheeling Township, same county, in the Niagara lime formation. J. F. Bosh is drilling a test on the Jennie Ross farm, Section 35, Oxford Township, same county.

In Trumbull County, Farmington Township, the Wittmer Oil & Gas Co. is drilling a test on the H. G. Reibel farm, Lot 90, and the same company got a light gas showing in a test on the Dallas H. Strock farm, Section 14, Southington Township, same county, at 3,503 feet, and in the Newburg formation, and now drilling for a deeper pay. Same company's test on the James G. Knowlton farm, Nelson Township, Portage County, reported at a depth of 4,225 feet.

In Wayne County, Wayne Township, David Shafer is drilling deeper at his test on the Frank Jontes farm, Section 8.

In Knox County the Reno Oil & Gas Co. has a rig in for No. 3 on the S. S. Day farm, Section 11, Jefferson Township.

George Jewell and others failed to find a pay in the Berea sand in their test on the James Miller farm, Section 5, Monroe Township, Guernsey County, from 1,202-270 feet, and is drilling deeper to the Lime formation.

ILLINOIS FIELDS

Illinois Field reported only one completion, Cain & Pollock's test on the George Stolberg farm, Section 28, St. Clair Township, St. Clair County, south of East St. Louis, which developed into a dry hole,

In Clark County only two wells are under way at this time, one of them being shut down, which is Tilford & Morrow's test on the W. B. Johnson farm, Section 36, Casey Township, the other being J. E. Hood's No. 8 on the H. Briscoe farm, Section 32, Parker Township, and the first well to be drilled on Parker Prairie, where so much excitement prevailed more than 20 years ago, and was very shallow territory as well as productive.

Walter Cline is drilling a test on the A. D. Hildreth farm, Section 27, Lafollette Township, Coles County, and about due for completion.

The Robinson Field of Crawford County has but two wells drilling and a rig up for a test by Jones and others on the C. A. Taylor farm, Section 2, Honey Creek Township, while in Prairie Township, Price & Weger are drilling a test on the H. Standfield farm, Section 36, and Roger Dill and others are drilling a test on the H. Brown farm, Section 6, same township.

KENTUCKY FIELDS

Kentucky experienced another quiet week as there were but half a dozen new wells brought in in four counties. In Daviess County, Ellis & Ashby's test on the Noble Rhodes farm, in the Jones Pool, and located 520 feet from the north line and 150 feet from the west line of the lease, produced an initial of 65 bbls. at a depth of 642 feet. Three Sands Oil Co.'s test, 1,000 feet from the south line and 400 feet from the west line of the Law Gibson farm, near the Utica Pool, produced an initial of 5 bbls. from the Barlow sand at 1,354 feet. Mida McMahan drilled a dry hole in a test 1,200 feet from the north line and 400 feet from the west line of the Hugh Wimsatt farm, a half mile east of the Jones Pool, at a depth of 690 feet.

In Ohio County, near Adaburg, the Victor Oil Co.'s No. 3 in the southwest corner of the Jesse L. Ralph farm, produced 5 bbls. the first 24 hours.

In McLean County, Ott Neathers and others' test on the Fanney Foley farm, a mile and one-half north of the hamlet of Livermore, is credited with a gas volume of 1,500,000 feet.

Gulf Coast Fields and Wildcats

(Continued from Page 48)

Yount Lee Oil Co.'s No. 4-A Zadie Fisher, Wm. Bloodgood Sur., 301 ft. from W line and 96 ft. from S line of tract ..... Drlg. hard sand and lime 3,993 ft.

LOST LAKE—CHAMBERS COUNTY

Pure Oil Co.'s No. 16 Mayes, E. H. R. Wallis Sur., 1,825 ft. N and 1,429 ft. E of No. 1 Lost River ..... Building derrick.

ORCHARD—FORT BEND COUNTY

Gulf Prod. Co.'s No. 34 Moore, Mark Smith Sur. ..... Drlg. hard sand 2,456 ft.

RABBS RIDGE—FORT BEND COUNTY

Gulf Prod. Co.'s No. 1 Gubbels, 300 ft. E and 300 ft. N of SW cor., Blk. 4, Samuel Kennedy Sur. ..... Drlg. hard sand 2,105 ft.

Gulf Prod. Co. and Humble O. & R. Co.'s No. 2-A F. I. Booth (second hole), Samuel Kennedy Sur., 75 ft. S of No. 2-A (first hole) ..... Comp. flowing 1,000 bbls. daily 5,320 ft.

Gulf Prod. Co. and Humble Oil & Ref. Co.'s No. 3-A T. I. Booth, Samuel Kennedy Sur., 200 ft. due S The Texas Company's No. 1 Wolters ..... Drlg. shale 4,065 ft.

Gulf Prod. and Humble O. & R. Co.'s No. 4-A F. I. Booth, 300 ft. S and W, SW cor. of Gubbels 100-ac. tr., Blk. 4, Samuel Kennedy Sur. ..... Spudded.

Gulf Prod. Co. and Humble O. & R. Co.'s No. 5-A F. I. Booth, 400 ft. E and 300 ft. S of SW cor. of Gubbels 100-ac. tr., Blk. 4, Samuel Kennedy Sur. ..... Derrick.

Gulf Prod. Co. and Humble Oil & Ref. Co.'s No. 3 T. R. Booth, Samuel Kennedy Sur., 2,991 ft. from W line and 487 ft. from E line of E half of tract (452 ac.)... Spudded.

Gulf Prod. Co. and Humble O. & R. Co.'s No. 4 Meyers, John Rabb Sur., 250 ft. E of No. 3 ..... Drlg. hard sand 1,276 ft.

Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 3 Davis, Robt. Peebles Sur., 2,985 ft. from W line and 350 ft. from N line ..... Drlg. shale and lime 2,915 ft.

Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 5 George, John Rabb Sur., 1,000 ft. E of No. 4 ..... Location.

Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 2-B George, John Rabb Sur., 1,000 ft. from W line and 330 ft. from N line of "B" lease ..... Drlg. sticky shale 4,729 ft.

Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 4 Lockwood-Second hole, John Rabb Sur., 250 ft. E of No. 4 Lockwood-First hole ..... Drlg. sticky shale and lime 2,958 ft.

Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 5 Lockwood, John Rabb Sur., 300 ft. from N line and 1,000 ft. from W line of 320-ac. tract ..... Location.

Humble O. & R. Co. and Gulf Prod. Co.'s No. 8-A Lockwood & Sharp, J. Rabb Sur., 1,000 ft. W, 300 ft. S NE cor. of 369.3-ac. tract ..... Drlg. tough shale 4,144 ft.

Humble O. & R. Co. and Gulf Prod. Co.'s No. 4-B Lockwood & Sharp, J. Rabb Sur., 1,242 ft. from W line and 526 ft. from S line of tr. ..... Shale 1,010 ft.; cmtd. 10¾-in. csg.

The Texas Company's No. 2 Wolters, Samuel Kennedy Sur., 350 ft. out of SE cor. of 100-ac. lease ..... Drlg. gumbo 1,021 ft.

HIGH ISLAND—GALVESTON COUNTY

Yount Lee Oil Co.'s No. 30 Cade, N. Fitzsimmons Sur., 300 ft. NE of No. 28 in line parallel with NW line Blk. 15 ..... Sand showing oil 4,495-4,504 ft.

Yount Lee Oil Co.'s No. 31 Cade, N. Fitzsimmons Sur., midway between and in line with Nos. 21 and 29 Cade ..... Drlg. shale and lime 4,320 ft.

Yount Lee Oil Co.'s No. 2 Broussard & Orme, Martin Duman Sur., 300 ft. SE of No. 1 ..... Drlg. shale 5,910 ft.

Yount Lee Oil Co.'s No. 12 Smith, Martin Dunman Sur., 330 ft. W of No. 11 and 100 ft. N of No. 2 ..... Drlg. sand and lime 4,296 ft.

Yount Lee Oil Co.'s No. 2 M. M. Spencer, Martin Dunman Sur., center of tract in line with No. 11 Smith and No. 2 Nellie League ..... Drlg. sand and lime 4,912 ft.

MANVEL—BRAZORIA COUNTY

The Texas Company's No. 2 Ewing, 1,220 ft. southwesterly and 200 ft. northwesterly at right angles out of E cor. of Blk. E of Suburban Gardens Subd., Harvey N. Little Sur. ..... Rig.

BATSON—HARDIN COUNTY

Gulf Prod. Co.'s No. 173 Wing, J. Knight Sur. ..... Rig.

SARATOGA—HARDIN COUNTY

Rio Bravo Oil Co.'s No. 87-A "J" ..... Sand showing oil 949 ft.; fishing drill pipe.

SOUR LAKE—HARDIN COUNTY

Jackson Mineral Oil Co.'s No. 1 Lula Hebert, 50 ft. from N line and 72 ft. from E line of 2-acre tract, Lot 3, Stephen Jackson Sur. ..... Spudded.

HUMBLE—HARRIS COUNTY

Burt & Deerings No. 2 C.O.&G.-Texas Co. fee, J. B. Stephenson Sur., 50 ft. E and 50 ft. S of SE cor. of Wheeler & Pickens Blk. 24 in 25-acre tract ..... Set screen 1,870 ft.; comp. pumping 25 bbls. net oil.

J. D. Clay's No. 2 Bender, R. Dunman Sur., 150 ft. from S line and 50 ft. from E line of 100-acre tract ..... T.D. 1,225 ft; sand 1,183-1,217 ft; set 2 joints of 4½-in. screen; comp. flowing 20 bbls. net oil.

J. D. Clay's No. 3 Bender, Robert Dunman Sur., 260 ft. N and 50 ft. W of SE cor. of Bender 100-acre tract.. Rig.

Sun Oil Co.'s No. 28 Bender, W. B. Adams Sur., 350 ft. W of No. 27 ..... Drlg. shale 3,805 ft.

Sun Oil Co.'s No. 59 River, R. Dunman Sur., 74 ft. from E line and 1,441 ft. from S line of block ..... Rig.

Sun Oil Co.'s No. 60 River, Robert Dunman Sur., 34 ft. from W line and 2,272 ft. from S line of tract ..... Drlg. sand 1,212 ft.

The Texas Co.'s No. 26 House, Mary Owens Sur., 100 ft. W of No. 20 ..... T.D. 3,831 ft.; plugged to 3,725 ft.

MYKAWA—HARRIS COUNTY

Crown-Framer Oil Co.'s No. 1-A Sladous, Wm. Lovett Sur., 75 ft. due W of No. 1 ..... Set 26 ft. of 5 3/16-in. screen 4,121 ft.; blew in but cut out master gate; blowing out of control est. 40,000,000 ft. dry gas.

Crown-Framer Oil Co.'s No. 2 Minnetex, 100 ft. from N line and 100 ft. from E line of W half of Block 251, Wm. Lovett Sur. ..... Location.

Hamill & Smith's No. 1 Ward, 50 ft. out of SE cor. of Ward 10-ac. tract, Blk. 186, Wm. Lovett Sur. ..... Location.

PIERCE JUNCTION—HARRIS COUNTY

Gulf Production Co.'s No. 35 Taylor, Hamilton Sur. No. 52, 50 ft. S of No. 1 ..... Drlg. sticky shale 4,625 ft.

Rio Bravo Oil Co.'s No. 12 fee, J. Kopman Sur., 350 ft. from N line and 150 ft. from W line of tract ..... Drlg. shale and boulders 1,856 ft.

Rio Bravo Oil Co.'s No. 25-A Settegast, 625 ft. W and 525 ft. N of SE cor. "A" lease, Jas. Kopman Sur. No. 44 ..... Rig.

Moody Corp.-Pure Oil Co.'s No. 1 Herman (W.O.), Jas. Kopman Sur., 200 ft. due W of C of E line of 25-acre tract ..... Pulling screen to deepen 4,831 ft.

FANNETT—JEFFERSON COUNTY

Gulf Prod. Co.'s No. 6 Burrell, Wm. Smith Sur., 1,610 ft. N and 300 ft. E of SW cor. of 232-acre tract .... Spudded.

SPINDLETOP—JEFFERSON COUNTY

Gulf Prod. Co.'s No. 233 Gladys, J. A. Veatch Sur. ..... Drlg. rock 556 ft.

Oil and Gas Pool Map

The Oil and Gas Journal has compiled, from information furnished by its branch editorial offices throughout the United States and Canada, a large wall map showing all oil and natural gas pools in the United States and Canada.

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9-8-32

ESPERSON—LIBERTY COUNTY

Cranfill-Reynolds Co.'s No. 1 Moore's Bluff (D.D.), 50 ft. out of NE cor. of M. Duncan ..... Set 1 joint 5-in. screen 3,580 ft.; comp. flowing 200 bbls. P.L. oil, 70 lbs. pressure, ¾-in. choke.

Cranfill-Reynolds Co.'s No. 5 Davis (D.D.), Kokernut Sur., 150 ft. from S line, 1,197 ft. from E line of tract ..... No report.

Cranfill & Reynolds' No. 5 Esperson (W.O.), M. Duncan Sur., 100 ft. N line and 300 ft. E line ..... T.D. 6,731 ft.; cmtd. hole to 5,500 ft.

Cranfill-Reynolds Co.'s No. 9 Moore's Bluff, M. Duncan Sur., 500 ft. S of N line of Moore's Bluff tract in line with No. 6 Davis and No. 6 Moore's Bluff ..... Location.

Cranfill-Reynolds Co.'s No. 10 Moore's Bluff, M. Duncan Sur., 1,500 ft. from E line and 2,100 ft. from N line of 632-ac. tract ..... Rig.

DAMON MOUND—BRAZORIA COUNTY

Intercoastal Oil Co.'s No. 10 Wisdom, A. Darst Sur., 440 ft. from NW line and 170 ft. from SW line of tract ..... Location.

HANKAMER—LIBERTY COUNTY

Gulf Prod. Co.'s No. 16 Boyt, H.&T.C. Sur. No. 22, 675 ft. E of No. 6 and 685 ft. SE of No. 8 ..... Drlg. rock 3,604 ft.

HULL—LIBERTY COUNTY

Aberoil Co., Inc.'s No. 1 fee, Jesse DeVore Sur., 700 ft. from E line and 64 ft. from N line ..... Derrick.

Eclipse Oil Co., No. 2 Barrow, Jesse Devore Sur., 55 ft. W, 35 ft. S of most easterly NE cor. 3.7-ac. tract.... T.D. 5,450 ft.; drill stem stuck.

Eclipse Oil Co.'s No. 1 Knox-Nelson-Layton, Jesse DeVore Sur., 30 ft. from N line and midway E and W of ½-acre tract ..... Derrick.

Empire G. & F. Co.'s No. 34 Barngrover, Jesse DeVore Sur., 75 ft. out of SW cor. of lease ..... Spudded.

Hannah Oil Co.'s No. 1 Hannah, Jesse DeVore Sur., 100 ft. W of The Texas Co.'s No. 1 Hannah ..... Drlg. gumbo 1,201 ft.

D. & L. Prod. Co.'s No. 3 Mecom & Layton, Jesse DeVore Sur., 80 ft. from S line, 60 ft. from W line of 5-ac. tr. ..... Drlg. sand and shale 4,500 ft.

Houston Prod. Co.'s No. 1 Baldwin, Jesse DeVore Sur., 222 ft. from S line and 50 ft. from E line of 5-acre tract ..... Pulling screen to deepen 4,706 ft.

Republic Prod. Co.'s No. 91 Dolbear (D.D.), Jesse DeVore Sur. ..... Sand 2,544-85 ft.; tested S.W.; pulled screen to deepen.

Republic Prod. Co.'s No. 129 Dolbear (W.O.), Jesse DeVore Sur. ..... No report.

The Texas Company's No. 7 Hannah (W.O.), 200 ft. out of SW cor. tract in Jesse DeVore Sur. ..... Drlg. sandy shale 4,981 ft.

NORTH DAYTON—LIBERTY COUNTY

V. H. Borsodi's No. 2 Gulf fee (W.O.), H.&T.C. Sur., 600 ft. from N line and 82 ft. from E line of tract.. T.D. 5,102 ft.; sidetracked at 3,800 ft. and drlg. sandy shale 4,625 ft.

MARKHAM—MATAGORDA COUNTY

Rycade Oil Corp.'s No. 4 Meyers, 250 ft. from S line and 125 ft. from E line of SW, Blk. 1, William Hadden Sur. ..... Trying to plug cavity 3,088 ft.

PORT NECHES—ORANGE COUNTY

The Texas Company's No. 2 Polk-Kuhn-Glass, 350 ft. E and 100 ft. S of SW cor. of Marshall Beauchamp Sur. ..... Cmtd. 13⅜-in. csg. 159 ft.

REFUGIO—REFUGIO COUNTY

Hewitt & Dougherty's No. 1 M. F. Lambert, Wm. Hews and L. Brown Sur., 4,350 ft. NE along NW line from SW cor. of United Prod. Corp.'s M. F. Lambert lease and thence 990 ft. SE at right angles ..... No report.

E. M. Jones' No. 1-B Mitchell (D.D.), 250 ft. NW of SE line and 250 ft. SW of Mission River ..... T.D. 9,134 ft.; plugged to 8,960 ft.; D.S. test 8,910-60 ft; showed brackish wtr.; standing.

Ed Jones' No. 2 Strauch, 650 ft. from S line and 200 ft. from E line of Lot 13, Sec. 12, Refugio town tr. .. S.D. 480 ft.

T. P. Morgan's No. 2 M. F. Lambert, 993 ft. from W line and 150 ft. from S line of lease in NE cor. of town tract ..... No report.

CLAY CREEK—WASHINGTON COUNTY

Nicholson Oil Corp.'s No. 1 Bimage, C of E½ of J. F. Perry Sur., 200 ft. from W line and 1,300 ft. from S line of 242-ac. tract ..... No report.

SOUTH LOUISIANA FIELDS

JENNINGS—ACADIA PARISH

Reliable Oil Co.'s No. 3 Rawson & Haber, 1,800 ft. N and 400 ft. W of SE cor., Sec. 46-9s-2w ..... Cmtd. 6-in. csg. 1,760 ft. standing.

SORRENTO—ASCENSION PARISH

Union Sulphur Co.'s No. 22 United Land Co., 5,760 ft. N and 1,360 ft. W of SE cor., Sec. 15-10s-4e..... Drlg. rock 1,598 ft.

IOWA—CALCASIEU AND JEFF DAVIS PARISHES

Magnolia Pet. Co.'s No. 2 Waite, 330 ft. out of NE cor. SE. Sec. 12-9s-7w ..... Drlg. sand 6,336 ft.

Shell Pet. Corp.'s No. 2 Fontenot, 225 ft. E and 325 ft. N of SW cor. of Sec. 7-9s-6w ..... T.D. 5,011 ft.; reaming to set 9⅝-in. csg. 5,000 ft.

EDGERLY—CALCASIEU PARISH

C. M. Crotty Oil Co.'s No. 7 Lillard (W.O.) ..... S.D. 2,824 ft.

LOCKPORT—CALCASIEU PARISH

Magnolia Pet. Co.'s No. 9 Bordages (W.O.), 319 ft. N and 90 ft. E of SW cor. of NW NE Sec. 8-10s-9w .... T.D. 6,900 ft.; plugged to 6,664 ft.; tested S.W.; abnd.

Union Sulphur Co.'s No. 3 Martha Moss, 300 ft. W, 150 ft. S, NE cor. NW SE. Sec. 8-10s-9w ..... Drlg. gumbo 5,904 ft.

SULPHUR—CALCASIEU PARISH

Union Sulphur Co.'s No. 750 fee (D.D.), Sec. 29-9s-10w.... Sand showing oil 4,419 ft.

Union Sulphur Co.'s No. 769 fee, 295 ft. S, 918 ft. W of C of Sec. 29-9s-10w ..... Salt 6,053 ft.; set 10 ft. of 4½-in. screen in sand 4,684-92 ft.; comp. flowing 860 bbls., 230 lbs. pressure, ½-in. choke.

Union Sulphur Co.'s No. 770 fee, 292 ft. S, 1,243 ft. W of center, Sec. 29-9s-10w ..... Location.

Union Sulphur Co.'s No. 772 fee, 145 ft. S, 882 ft. W of center, Sec. 29-9s-10w ..... Drlg. gumbo 2,665 ft.

Union Sulphur Co.'s No. 774 fee, 226 ft. W, 114 ft. S of center of Sec. 28-9s-10w..... Drlg. gumbo 2,112 ft.

VINTON—CALCASIEU PARISH

Gulf Ref. Co.'s No. 6 Gray, Sec. 33-10s-12w, 160 ft. W of No. 3 ..... Coring sand 2,736 ft.

Marrs McLean's No. 14 Gray, Sec. 33-10s-12w, 88 ft. W and 30 ft. S of No. 4 ..... Sand 1,682 ft.; set 8-in. csg.

Vinton Pet. Co.'s No. 5 Matilda Gray (D.D.), 456 ft. W, 362 ft. N, SE cor. SW NE, Sec. 33-10s-12w..... Coring sand 3,686 ft.

BLACK BAYOU—CAMERON PARISH

Brownie-Babbette Oil Co.'s No. 1 Moore, 562 ft. W and 50 ft. S of NE cor. of E half SE of Sec. 18-12s-12w.. Sandy shale showing oil 6,619-33 ft.; set screen.

GUEYDAN—VERMILLION PARISH

Pure Oil Co.'s No. 3 Alliance Trust Co., 675 ft. from N line and 460 ft. from W line of Sec. 34-11s-1w ..... Derrick.

HACKBERRY—CAMERON PARISH

Calcasieu Oil Co.'s No. 35 Watkins, 360 ft. NE of No. 33 in line with No. 20 in NW cor. Sec. 24-12s-10w ..... Drlg. rock 2,963 ft.

Lackawanna Oil Co.'s No. 1 Ellender, 320 ft. S and 150 ft. E of NW cor. of SE SE of Sec. 21-12s-10w ..... Derrick.

Pop Oil Co.'s No. 1 Ellender (W.O.), 617 ft. N, 931 ft. W, SE cor. NE, Sec. 19-12s-10w..... Drlg. salt 2,736 ft.

J. D. Sutton's No. 7 Irwin, 1,320 ft. N and 1,490 ft. W of SE cor. of Sec. 13-12s-10w ..... Set 15 ft. of 3-in. screen in sand 3,014-15 ft; swbd. dry; standing.

Union Sulphur Co.'s No. 2 Gulf Land-Humble lease, 711 ft. N and 430 ft. W, SE cor., Sec. 11-12s-10w.....Drlg. gumbo 5,906 ft.
Union Sulphur Co.'s No. 1 Gulf land (Pure Oil Co. lease), 1,958 ft. N, 400 ft. W of SE cor., Sec. 11-12s-10w .....Sand showing oil 5,316-24 ft drill pipe stuck; sidetracked 5,981-7,800 ft.; drill pipe twisted off.
Yount Lee Oil Co.'s No. 11 School land, 2,810 ft. W and 1,608 ft. N, SE cor., Sec. 15-12s-10w .....Hard sand 4,650 ft.

CHOCTAW—IBERVILLE PARISH

Standard Oil Co.'s No. 3 Myrtle Grove, Sec. 52-9s-11e, 400 ft. S and 50 ft. W of No. 1 .....Drlg. gumbo 810 ft.

WHITE CASTLE—IBERVILLE PARISH

Shell Pet. Corp.'s No. 6 Wilbert, Sec. 9-11s-12e, 200 ft. out from No. 5 .....Drlg. gumbo 1,212 ft.

PORT BARRE—ST. LANDRY PARISH

Gulf Ref. Co.'s No. 2 Wilson & Cockran, Sec. 4-8s-5e, 600 ft. N of No. 1 .....Set 2 joints 4½-in. screen 3,377 ft.; swabbing.
Port Barre Oil Co.'s No. 1 Sibille (W.O.), Sec. 20-6n-5e, 600 ft. S and 124 ft. E, NW cor. of 30-ac. tr. ....No report.
The Texas Co.'s No. 12 Botney Bay, Sec. 4-6s-5e, N 7° 65 minutes E, 692 ft. from most southerly NE cor. of tr., thence N 82° 5 minutes W 474 ft. .....Sand showing oil 3,331 ft.; cmtd. 7-in. csg.

STARKS—CALCASIEU PARISH

Emerson & Moore's No. 2 Industrial, 400 ft. S of No. 1, in SE cor. NE NW, Sec. 30-9s-12w.....Spudded.
Gulf Ref. Co.'s No. 31 Lutcher-Moore, Sec. 19-9s-12w, 500 ft. E of No. 15 .....Spudded.

SWEET LAKE—CAMERON PARISH

Pure Oil Co.'s No. 11 Yount Lee, Sec. 12-13s-8w, 800 ft. S 66 deg. 42 min. from No. 9 .....Building derrick.

LEESVILLE—LA FOURCHE PARISH

The Texas Co.'s No. 5 L.L.&E., 3,888 ft. S, 105 ft. E of NW cor. of Sec. 26-21s-22e .....Salt 4,107-4,177 ft.

TEXAS

MISCELLANEOUS WILDCATS

AUSTIN COUNTY

Great Southern Oil Co.'s No. 1 Schevojsa, 320 ft. N, 78° E of N cor. B. Dottery Sur. .....S.D. 2,818 ft.

BRAZORIA COUNTY

Danciger O. & R. Co.'s No. 1 W. C. Hunt, Pledger, 5,220 ft. from the N line and 6,500 ft. from E line of W. Coirson Sur. .....Cmtd. 10-in. csg. 605 ft.
John Deering's No. 1 C. W. Chapman, 294 ft. from S line and 104 ft. from E line of Lot 2, Andrew Robinson Sur. .....Coring shale 4,817 ft.
Shell Pet. Corp.'s No. 5 Blakely-Winston, Danbury, 1,410 ft. N 63° and 1,200 ft. N 27° W of SW cor. of H.T.&B. Sur. No. 14 .....Drlg. sandy shale and lime 1,982 ft.
The Texas Company's No. 3 Belcher, Manvel, Harvey N. Little Sur., 1,220 ft. southwesterly and 200 ft. southeasterly out of N cor. of Belcher lease .....Set 43 ft. 7-in. screen 4,009 ft.; comp. flowing 1,000 bbls. P.I. oil; 11/16-in. choke, 320 lbs. on tubing and 725 lbs. on csg.
Tri-fin Oil Co.'s No. 1 Moers, 1,635 ft. southwest of Chocolate Bayou and 693 ft. SE of NW line of F. Moore Sur. .....Location.

BURLESON COUNTY

Ball & Knob's No. 2 Polansky, M. B. Lawrence Sur., 359 ft. from E line and 469 ft. from N line of 158-ac. tr. .....No report.
E. M. Bracey et al's No. 1 Bracey, J. Lastly Sur., 880 ft. from E cor. of P. Taylor 110 acres, SE along NE line of J. G. Houston 160 acres, thence 180 ft. at right angles in 3-acre tract .....No report.
Marek & Son's No. 3 A. Marek, N. McFaddin Sur., 1,068 ft. N and 225 ft. W of SE cor. of tract .....Standing 2,210 ft.
Sampson Oil & Gas Co.'s No. 2 Duckworth & Gilley, SE cor. of P. Singleton Sur., 700 ft. E of No. 1 .....Drlg. 2,475 ft.
J. E. Stubblefield et al's No. 1 Mitchell, A. T. Woolridge Sur., 31 ft. SW and 4,340 ft. SE of S cor. of Joseph Henson Sur. .....Gumbo 600 ft.; standing.

COLORADO COUNTY

Bunte and Shell Pet. Corp.'s No. 1 Rudolph Matuska, Joshua Henneke Sur., 700 ft. S of most northerly NW cor. in C E and W of 130-acre tract .....Cmtd. 10-in. csg. 291 ft.
Smith, Adair et al's No. 1 Barnett, 230 ft. from W line and 330 ft. from S line of Blk. 26, Q. K. Winn Sur....Black shale 4,345 ft.; standing.

FORT BEND COUNTY

Naylor & DeCosta's No. 1 Naylor, 6,350 ft. N, 55 deg. E from SW cor. 653-acre tract in Christman Sur. .....T.D. 5,850 ft. (est.); sidetracked at 3,200 ft. and drlg. 5,615 ft.
North Star Pet. Co.'s No. 1 Guyler, Andrew Roberts Sur., 330 ft. out of SW cor. of 100-acre tract .....Cmtd. 10-in. csg. 952 ft.
O'Hara et al's No. 1 Mayes, N. F. Roberts Sur., 300 ft. from N line and 500 ft. from E line of M. K. Mayes' 114 acres .....Drlg. lime rock 300 ft.
Stone & Wyman's No. 1 Beard, H.&T.C. Sur. No. 118, 1,150 ft. from NW line, 1,892 ft. from NE line.....Temp. a'nd. 1,645 ft.

GALVESTON COUNTY

Humble Oil & Ref. Co.'s No. 1 Rosenkranz, Green's Bayou, center N half of Lot 10, Sarah White Sur.....Cmtd. 20-in. surface csg. 183 ft.

GRIMES COUNTY

Barnett et al's No. 1 Dodd, Timothy Jones Sur. .....Shut down 2,689 ft.
W. J. Brightwell's No. 1 Combs, Samuel Beauman Sur., 350 ft. from S line and 622 ft. E of extreme W line of 276-acre tract .....Rig.

HARDIN COUNTY

W. R. Alexander et al's No. 1 Southwestern Lbr. Co., 150 varas W of C of E line of Mary K. Sherman Sur..Drlg. shale and lime 3,465 ft.
Gulf Prod. Co.'s No. 1 Kirby, Ariola, 330 ft. out of SE cor. of 100-ac. tract, Ariola Sur. .....Rig.
Houston Oil Co. and Republic Prod. Co.'s No. 1 Ariola fee, 3,660 ft. from N line and 9,700 ft. from E line of Ariola Sur. .....Drlg. sand and shale 4,195 ft.
Houston Oil Co.'s No. 1-X Ariola fee, 3,000 ft. from N line and 5,610 ft. from W line of Ariola Sur. .....Cmtd. 12½-in. csg. 881 ft.
Houston Oil Co.'s No. 1-Y Ariola fee, 3,000 ft. from W line and 5,610 ft. from N line of Ariola Sur. .....Derrick.
Houston Oil Co.'s No. 1-Z Ariola fee, 5,610 ft. from W line and 5,610 ft. from N line of Ariola Sur. .....Location.
Joe E. Proctor's No. 1 Russell & Teagle, 3,650 ft. E and 2,777 ft. N of NW cor. of Wm. W. Young Sur.....Drlg. gumbo and lime 2,463 ft.

HARRIS COUNTY

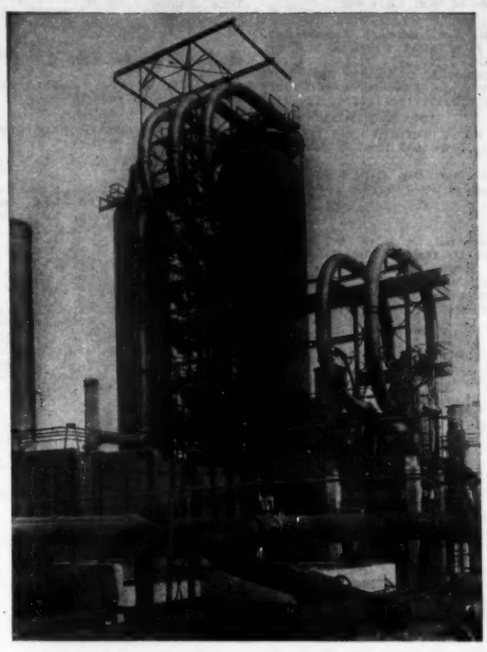
Bayou Oil Co.'s No. 1 Hall, 350 ft. from N line and 970 ft. from E line of Wm. Hedge Sur. .....Gumbo 3,504 ft.; S.D.; W. O.
T. V. Buckhoive & Sons' No. 1 Miller, Arthur McCormick Sur. .....D.S. stuck 977 ft.
John Deering's No. 1 Warren, Hockley T. Snell Sur., 100 ft. due south of The Texas Co.'s No. 3 Warren..S.D. 2,411 ft.
H. D. Morse et al's No. 1 Schiveinle, Wm. White Sur., 900 ft. S 80° W of NW cor. of Lienberger 20-ac. tract in Blk. 1 .....Shut down 3,612 ft.
Victor Smith's No. 1 Dr. Griffith, S. Bell Sur., 582 ft. from E line and 60 ft. from N line of 250-acre tract..Standing 225 ft.

JASPER COUNTY

Next Drlg. Co.'s No. 1 Flourney, B. F. Jones Sur., 900 ft. NW of Helmerich & Payne's No. 1 Flourney .....Shut down 4,521 ft.
P. Michael et al's No. 1 Eck, G.C.&S.F. Sur., 502 ft. from N line and 497 ft from E line of tr. .....Drlg. gumbo 525 ft.

JEFFERSON COUNTY

Elam & Pipkin's No. 2 Broussard, John McGaffey Sur., 150 ft. due E of No. 1 .....Shut down 1,855 ft.



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GULF REFINING COMPANY

General Sales Offices: Pittsburgh, Pa.

Coastal Oil & Gas Co.'s No. 1 Young, Joseph Grigsby Sur., 250 ft. from E line and 160 ft. from S line of 40-acre tract in Block F-5, Lot 6 ..... Drlg. shale and lime 1,908 ft.
Jack Schultz' No. 2 Todd, Cheek, 1,300 ft. S of No. 1 and 130 ft. E of W line of Wm. Carr Sur. ..... Drlg. gumbo 1,906 ft.

LIBERTY COUNTY

Leon Brisley's No. 1 J. M. Neal, Edward Tanner Sur., 1,800 ft. E, 1,300 ft. N of most westerly NW cor. of Margaret Evans Sur. ..... Drlg. sticky shale 2,306 ft.
Mayes et al's No. 1 Dunman, J. C. Martin Sur., 1,111 ft. from S line of survey and 2,360 ft. W of Trinity River ..... Spudded.

MATAGORDA COUNTY

Danciger O. & R. Co.'s No. 1 Turner, 4,900 ft. from NE line and 3,800 ft. from SE line of M. Cummings Sur. ..... Drlg. surface formation 100 ft.
Dr. Griffith et al's No. 3 Baer, Big Hill, 5,000 ft. N, 3,000 ft. E from SW cor. of Seth Ingram Sur. ..... T.D. 2,720 ft.; cmtd. string of combination 6 and 4-in. csg. 2,700 ft.; drld. plug and tested S.W. to reset; standing.
Shepherd's Mott Salt Dome Oil Co.'s No. 1 Hawkins, Shepherd's Mott, 5,265 ft. from N line and 1,320 ft. from E line of B. McCarthy Sur. ..... Drlg. sandy shale 5,466 ft.
United North & South Oil Co.'s No. 1 Stoddard, J. C. Keller Sur., 150 ft. W and 545 ft. N of SE cor. Blk. 53, Buckeye Townsite ..... T.D. 7,950 ft.; plugged to 7,926 ft.; set 120 ft. 4-in. screen in sand 7,808-7,924 ft.; blew in est. 1,000 bbls. fluid, 18 per cent b.s. and water, with 20,000,000 ft. gas; cut out packer and now out of control; gravity oil 28.4° (cor.).

MONTGOMERY COUNTY

Alpha Oil Co.'s No. 1 Dunn, C of N 20 ac. of S 50 ac., W. N. Real Sur. ..... Cored sand and shale 5,198-5,215 ft.
Brown & Wheeler's No. 1 Hooper, J. D. Watson Sur., 466 ft. from N line of 10-acre tract in C E and W ... Rig.
Craft & Gesieke's No. 1 South Tex. Dev. Co., T.&N.O. Sur., Blk. 9 ..... Abnd. 5,502 ft.
Craft & Gesieke's No. 1 Keystone Mills, 300 ft. out of NE cor. of A. S. James (T.&N.O. No. 4) Sur. ..... S.D. for fuel 2,110 ft.
Gulf Coast Drlg & Prod. Co.'s No. 1-D South Texas Dev. Co., 466 ft. out of NE cor. 40-acre lease on dividing line of Theo. Slade and lower Alex McCown Sur. ... Drlg. gumbo 3,582 ft.
Hooper Oil Co.'s No. 1 W. M. Hooper, 466 ft. from N line in center east and west of L.&G.N. Sur. A-649... Spudded.
Houston Oil Co. and Heep Oil Co.'s No. 1 Dobbins, Ransom House Sur., 466 ft. east of W line in center north and south of 160-ac. tract ..... Spudded.
Houston Oil Co. and Heep Oil Co.'s No. 1 W. N. Hooper, Jr., 450 ft. from N line in center of east and west of L.&G.N. Sur. A-650 ..... Drlg. sand and clay 205 ft.
Humble Oil & Ref. Co.'s No. 1 C. L. Dobbins, Ransom House Sur., 425 ft. from N line and 466 ft. from W line of tract ..... T.D. 5,113 ft; sand 5,093-97 ft.; drld. plug at 5,042 ft.
Humble Oil & Ref. Co.'s No. 4 South Tex. Dev. Co., 1,900 ft. N from SE cor. of T. C. Rowell Sur., thence 400 ft. W at right angles ..... Set 53 ft. of 4½-in. screen 5,193 ft.; comp. flowing 64 bbls. hour... ¾-in. choke.
Humble Oil & Ref. Co.'s No. 5 South Texas Dev. Co., Theo. Slade Sur., 330 ft. S of S line of Gulf Coast Drlg. & Prod. Co.'s 60 ac. and due S offset latter's No. 1 ..... Drlg. sticky shale and lime 3,048 ft.
Humble Oil & Ref. Co.'s No. 6 South Texas Dev. Co., Theo. Slade Sur., 335 ft. from S line of survey and due N offset Heep Oil Corp.'s No. 1 Hamman ..... Drlg. shale and lime 3,012 ft.
Humble Oil & Ref. Co.'s No. 7 South Texas Dev. Co., Theo. Slade Sur., 331 ft. S of S line of Martin & Dewey 30-ac. tract and 330 ft. W of SE cor. ..... Shale and boulders 1,425 ft.; cmtd. 10¾-in. surface csg. 1,420 ft.
Humble Oil & Ref. Co.'s No. 8 South Texas Dev. Co., Theo. Slade Sur., 330 ft. E of E line and 331 ft. N of S line of Martin & Dewey 30 ac. ..... Drlg. hard sand and shale 3,902 ft.
Humble Oil & Ref. Co.'s No. 9 South Texas Dev. Co., Theo. Slade Sur., 330 ft. E and 325 ft. N of SE cor. Gulf Coast Drlg. & Prod. Co.'s 60 ac. ..... Rig.
Humble O. & R. Co.'s No. 10 South Texas Dev. Co., 1,125 ft. from S line and 660 ft. from E line of Sur.. Cmtd. 10¾-in. csg. 1,419 ft.
Humble Oil & Ref. Co.'s No. 1 Cartwright, John Davis Sur., 330 ft. from N line, 466 ft. from E line of 248.9-ac. tract ..... Sand 5,053-73 ft.; cmtd. 7-in. csg. 5,062 ft.
Humble Oil & Ref. Co.'s No. 2 Cartwright, John Davis Sur., 454 ft. from S line and 925 ft. from E line out of SE cor. of tract ..... Drlg. shale and boulders 405 ft.
Humble O. & R. Co.'s No. 3 Cartwright, John Davis Sur., 289 ft. from N line and 395 ft. from W line of Freeman 36 acres ..... Derrick.
Humble O. & R. Co.'s No. 4 Cartwright, John Davis Sur., 660 ft. out of NW cor. of tract ..... Derrick.
Humble O. & R. Co.'s No. 1 Plaeffiin, N. W. Real Sur., 626 ft. E and 343 ft. N of SW cor. of tract ..... Cmtd. 10¾-in. csg. 1,423 ft.
Lilly and Red Moon Oil Co.'s No. 1 Stella McDonald, John Davis Sur., 241½ ft. from E line, 202.5 ft. from S line of 5-ac. tract ..... S.D. 916 ft.
Lowrie & Young's No. 1 C. A. Damuth, approx. 5,430 ft. from E line and 3,018 ft. from S line of T. J. Nichols Sur. ..... Drlg. sandy shale 4,326 ft.
Miller Prod. Co.'s No. 1 Foster Lbr. Co., M. B. Lawrence Sur., 2,640 ft. from N line and 300 ft. from E line of 413-acre tract ..... Drlg. sandy shale 2,897 ft.
Pevehouse Oil Co.'s No. 1 Sealey, Jas. Pevehouse Sur., 1,575 ft. N of N line of Horton & Woodson's 1,562-acre tract and 2,226 ft. E of W line of H.&W. 1,870-acre tract ..... Shut down 3,984 ft.
Rheubotham et al's No. 1 A. H. Salis, Wm. Barker Sur., 390 ft. from E line and 400 ft. from N line of W 36 acres of Salis tract ..... Derrick.
Rowe & Flowers' No. 1 Varner, R. House Sur., 330 ft. out of NE cor. of 33-ac. tr. ..... Standing 5,255 ft.
Rowe & Flowers' No. 1 Alexander, 330 ft. out of SE cor. Lot 20 in the NW A. McCown Sur. ..... T.D. 5,254 ft.; plugged to 5,096 ft.; set 30 ft. screen; flowing by heads 700 bbls. fluid, 90 per cent water, daily.
Strake Oil Corp.'s No. 3 South Tex. Dev. Co., 2,475 ft. from W line and 790 ft. from S line of Theo. Slade Sur. ..... T.D. 5,098 ft.; plugged to 5,060 ft.
Sutton-Hawkins' No. 1 Foster, Rosca de la Garza Sur., 3,333 ft. N and 1,320 ft. E of NE cor. of W. J. Johnson 100-ac. tract ..... Spudded.
The Texas Company's No. 1 Moody, 1,400 ft. easterly and 466 ft. southerly out of NW cor. of Moody 494-acre lease, Ranson House Sur. ..... Drlg. gumbo and boulders 978 ft.
R. H. Vice's No. 1 S. L. Rose, Jose Maria De La Garza Sur., 1,777 ft. N and 344 ft. E of SW cor. 97-acre tract ..... Cored shale and sand 4,276 ft.

NEWTON COUNTY

L. A. James et al's No. 1 Price, T.&N.O. Sur., 1,000 ft. from W line and 500 ft. from N line of tract ..... Shut down 1,205 ft.
Sun Oil Co.'s No. 1 Peavey Moore Lbr. Co., 3,145 ft. from S line and 1,225 ft. from W line of F. Stoevar Sur. No. 4 ..... Drlg. shale 4,156 ft.

ORANGE COUNTY

Altex Oil Co.'s (Veteran Oil Co.) No. 1 Reed, A. Nelson Sur. No. 1, 500 ft. from N line and 350 ft. from E line of tract ..... Set 10-ft. blank and 15 ft. of 4½-in. screen 4,808 ft.; tested salt water; shut down.

POLK COUNTY

Anderson et al's No. 1 Duke, Peter J. Manard Sur., 330 ft. out of NW cor. of 235-acre tract ..... Cmtd. 12½-in. csg. 61 ft.
Cech & Stevens' No. 1 Ruth Lawrence, Castillian Sur., 300 ft. from W line and 790 ft. from S line of 54-acre tract ..... S.D. 1,169 ft.
W. H. Freeman's No. 2 Freeman, A. Viesca Sur. ..... Standing 3,374 ft.
Dick Schwabb's No. 1 Carlton Davis, A. Viesca Sur., 350 ft. out of most northerly SE cor. A. E. Munson 101-acre tract ..... Location.
Tony & Purdy's No. 1 Martha Roberts, Joaquin T. De Rumayor Sur. ..... Spudded and shut down.
G. A. Williams et al's No. 1 Carlton-Davis, 300 ft. E and N out of SW cor. of I.&G.N. Sur. No. 52 in 55-ac. tr. ..... Rig.

REFUGIO COUNTY

Gulf Prod. Co.'s No. 1 J. O'Connor, C.E.P.I.&M. Sur., 1,200 ft. from S line and 1,500 varas from E line of tract ..... Cored sand 5,705-07 ft.; making D.S. test.
Humble Oil & Ref. Co.'s No. 1 O'Connor (D.D.), 6,012 ft. S from NE cor. along SE line of Lon T. Rios Sur., thence 7,375 ft. W at right angles in John Keating Sur. ..... Abnd. 5,972 ft.
Humble Oil & Ref. Co.'s No. 2 O'Connor, John Keating Sur., 12,625 ft. N of S line at right angles and 3,155 ft. W of E line at right angles ..... T.D. 5,748 ft.; standing.

SAN JACINTO COUNTY

Joe L. Pace's No. 1 Foster Estate, H.&T.C. Sur. No. 3, 2,640 ft. from E line and 1,940 ft. from S line survey.. Rig.

TRINITY COUNTY

C. N. Beckner's No. 1 Mangum, J. A. Henderson Sur., 200 ft. out of NE cor. 80-acre tract ..... Shut down 1,374 ft.
Joseph M. Weaver's No. 1 Thompson, 150 ft. out of NE cor. of I.&G.N. Sur., No. 47 ..... S.D. 3,556 ft.

TYLER COUNTY

Allied Pet. Co.'s No. 3 Wilson, 1,500 varas from W line and 600 varas from N line of Mrs. E. Cheny Sur., Abst. 798 ..... T.D. 5,146 ft.; trying to pull 3-in. drill pipe.
Republic Prod. Co. and Houston Oil Co.'s No. 1 fee, 8,384 ft. from W line and 484 ft. from N line of Adolph Sterne Sur. ..... Drlg. shale 959 ft.

VICTORIA COUNTY

Houston Oil Co.'s No. 1-A McFaddin, 200 ft. from NE line, 340 ft. from SE line of I.R.R. Sur. No. 20 ..... T.D. 5,293 ft.; plugged to 1,673 ft.; drlg. sidetracked hole 4,826 ft.
Humble Oil & Ref. Co.'s No. 1 Pete Rydolph, John Kemper Sur., 2,617 ft. from E line and 1,013 ft. from W line of lease ..... Coring sand 5,196 ft.
The Texas Company's No. 3 McFaddin (W.O.), S 15° W 6,200 ft., N 75° W 1,350 ft. from NE cor. John M. Rine Sur. ..... Drlg. lime and shale 6,137 ft.
Union Oil Co.'s No. 1 Keeran, 4,166 ft. SW along SE line of Gulf Prod. Co.'s 2,500-ac. lease from most easterly cor., thence 1,390 ft. SE at right angles in Martin DeLeon Sur. ..... Sand 5,909-14 ft.; to make D.S. test.

WALKER COUNTY

W. E. Brown's No. 1 Horshall, 150 ft. out of SE cor. of E. Miller Sur. ..... Shut down 2,011 ft.
Hart Oil Co.'s No. 1 Thompson Lbr. Co., Jose Ortega Sur., 1,265 ft. S, 1,876 ft. W of SW cor. of J. B. Gibson's 71-acre tract ..... Shut down 2,090 ft.

WALLER COUNTY

McDaniel and associates' No. 1 Citizens State Bank, B.B.B.&C. Sur., C of 150-acre tract ..... No report.
Seven Wells Oil Corp.'s No. 1 Maxwell, Justo Liendo Sur., 225 ft. from N line and 492 ft. from W line of 86-acre tract ..... Drlg. sand 4,005 ft.

WASHINGTON COUNTY

M.O.&T. Corp.'s No. 1 Giddings, S. Young Sur., 200 ft. from S line and 150 ft. from W line of 698-acre tract ..... Shut down 65 ft.

WHARTON COUNTY

Gantt et al's No. 1 Laura Hahn, N. Manch Sur., 330 ft. out of NE cor. 142.17-ac. tract ..... Spudded and shut down.

SOUTH LOUISIANA

ASCENSION PARISH

Rio Bravo Oil Co.'s No. 1 Community Lease, Darrow, 300 ft. from N line and 1,500 ft. E at right angles from SW cor. of Sec. 15-10s-2e ..... Drlg. hard sand 3,332 ft.

BEAUREGARD PARISH

DeRidder Dev. Co.'s No. 1 McMahon, 200 ft. W and 150 ft. S of NE cor. of NW of Sec. 33-2s-2w ..... Gumbo 1,286 ft.

CALCASIEU PARISH

Cannon & Hughes' No. 1 J. S. Reed, Sec. 18-10s-12w... Derrick.
I. R. Irvine et al's No. 1 A. D. Mimms, 741 ft. N and 741 ft. W of SE cor. SE NE, Sec. 20-9s-7w..... Gumbo 500 ft.

EVANGELINE PARISH

Emile LeDeau's No. 1 Vidrine, 260 ft. W and 350 ft. S of NE cor. of Sec. 47-3s-3e ..... Shut down 1,420 ft.

IBERIA PARISH

Warrick Oil Co.'s No. 1 Bernard, 912 ft. N and 150 ft. E of SW cor. of Sec. 54-12s-7e ..... Standing 3,137 ft.

JEFFERSON DAVIS PARISH

Little City Oil Co.'s No. 1 Jennings Norwood, 1,975 ft. N and 675 ft. E of SW cor. of Sec. 44-9s-3w ..... Drlg. 3,862 ft.

PLAQUEMINES PARISH

Lake Washington-Freeport Sulphur Co.'s No. 2 Cockrell-Moran, Sec. 14-20-26e, 1,218 ft. N and 4,396 ft. E of station ..... Abnd. in salt 1,570-76 ft.
Lake Washington-Freeport Sulphur Co.'s No. 3 Cockrell-Moran, 5,100 ft. E and 1,000 ft. S of Washington Station, Sec. 14-20s-26e ..... Sulphur test.
Lake Washington-Freeport Sulphur Co.'s No. 4 Cockrell-Moran, 3,200 ft. S and 2,950 ft. E of Washington Station, Sec. 14-20s-26e ..... Sulphur test.
Lake Washington-Freeport Sulphur Co.'s No. 5 Cockrell-Moran, 5,200 ft. E and 350 ft. N of Washington Station, Sec. 14-20s ..... Sulphur test.
Lake Washington-Freeport Sulphur Co.'s No. 1 Louisiana State, 598 ft. N and 1,239 ft. E of station ..... Abnd. in salt 1,565-95 ft.
The Texas Co.'s No. 5 Garden Island Bay, 2,180 ft. W and 1,750 ft. S, NE cor., Sec. 107-23s-32e..... Location.

TERREBONNE PARISH

The Texas Company's No. 7 State-Lake Pelto, 2,216 ft. N, 104 ft. W of SE cor., Sec. 8-23s-18e ..... Derrick.
The Texas Co.'s No. 16 State-Lake Barre, 1,500 ft. S, 150 ft. E of NW cor., Sec. 30-21s-19e ..... Sand showing oil 3,782 ft.; cmtd. 7⅝-in. csg. 3,742 ft.
The Texas Company's No. 17 State-Lake Barre, 1,476 ft. W and 626 ft. S of NW cor. of Sec. 20-21s-20e ..... Rig.
The Texas Company's No. 3 Lake Barre-L.L.&E., 3,520 ft. S and 110 ft. E of NW cor. of Sec. 30-21s-20e .... Sand showing oil 3,808 ft.; cmtd. 7⅝-in. csg. 3,770 ft.

VERNON PARISH

Minerals Division Ilano Co.'s No. 1 Llano Del Rio, 543 ft. E and 300 ft. S of NW cor. of NW of Sec. 34-3n-9w ..... Shut down 1,380 ft.

WEST FELICIANA PARISH

Putnam Synd.'s No. 1 Como Plantation, Sec. 41-1s-14w... Shut down 2,449 ft.

Wildcat Operations in Southwest Texas

(Continued from Page 58)

BELL COUNTY

Alex Krause' No. 1 W. P. Edds, 650 ft. from S line, 150 ft. from W line of 100-acre tract in M. Moreno Sur. ..... T.D. 500 ft.; S.D.

BEXAR COUNTY

Amsden-Ingersoll-Miller's No. 1 Strumberg, 450 ft. to W line, 1,020 ft. to N line of tract, 12 miles SW of San Antonio ..... T.D. 1,054 ft.; standing.

S. W. Blount's No. 1-A S. A. Land & Dev. Co., 10 ft. from No. 1 in I. Perez Sur. ..... T.D. 965 ft.; moving in rotary.

Eckert et al's No. 1 Edwards, 150 ft. to N and W lines of farm in Martinez Sur. ..... T.D. 1,935 ft.; standing.

Robert C. Hill's No. 1 Schell, 1,300 ft. from N line, 1,100 ft. from W line of 161-ac. tract in Sec. 234, Perretaux Sur. ..... Drlg. 250 ft.

Rollin V. Hill, Sr.'s No. 1 Max Boeck, 1,700 ft. from N line, 2,700 ft. from E line of tract in J. R. Shepherd Sur. ..... Spudded in.

Linda Oil Co.'s No. 1 John and R. S. Watson, 600 ft. from S line, 150 ft. from E line of 200.7-ac. tract in Cruise Landin Sur. ..... T.D. 1,000 ft.; drlg.

Moore-Jauer's No. 1 Holly R. Ellison, 2,916 ft. from E line, 1,500 ft. from S line of farm in T. York Sur. .. T.D. 1,953 ft.; standing.

Dr. Ewell Neil's No. 1 J. Watson, 500 ft. from W line, 1,700 ft. from S line of B. Martinez Sur. ..... T.D. 2,495 ft.; in Edwards dry.

Jones & Volts' No. 1 Bonkowsky, 150 ft. to N and W lines of William McMenenes Sur., 12 miles E of San Antonio ..... T.D. 907 ft.; standing.

Linda Oil Co.'s No. 1 Watson, 150 ft. from E line, 600 ft. from S line of tract in Crux Landin Sur. ..... T.D. 1,000 ft.; drlg.

Schneider, Rees et al's No. 2 Claussen, 12 miles NE of San Antonio ..... T.D. 1,330 ft.; S.D.

M. E. Trussell's No. 1 L. B. Carruthers, Sr., 2,000 ft. from W line, 400 ft. from most easterly N line of tract in Sam McCullough Sur. ..... T.D. 550 ft.; drlg.

C. J. Webster Oil & Gas Co.'s No. 1 San Antonio Suburban Irrigated Farms, 200 ft. from S and W lines of Farm Lot 2, Blk. 49, in SW Bexar County ..... T.D. 1,160 ft.; drlg.

BROOKS COUNTY

M. P. Evans' No. 1 J. M. Martinez, 200 ft. from N and W lines of Blk. 11, Sec. 6, La Encantada Sur. ..... T.D. 1,480 ft.; standing.

CALDWELL COUNTY

Cargill et al's No. 1 Dameron, 150 ft. from N and W lines of 72-5-ac. tract in Dillard Cooper Sur. ..... Derrick.

E. D. Herne's No. 1 M. C. and P. W. Jeffrey 126-ac. tract, 150 ft. from N and E lines of tract in James George Sur. ..... Set surface pipe, waiting for wtr.

COMAL COUNTY

Caldwell & M. Lanier's No. 1 T. J. Byler, 175 varas from W line, 370 varas from N line of 320-acre tract in H.E.&W.T. Sur., Sec. 894 ..... T.D. 830 ft.; reinstated; drilling deeper.

DIMMITT COUNTY

Motes-Campbell Co.'s No. 1 Denton, 150 ft. from E line, 250 ft. from S line of Tracts 33 and 34 in Sec. 60 of Denton Colony Subd. ..... T.D. 400 ft.; waiting for csg.

DUVAL COUNTY

J. E. Anderson's No. 1 Wood-Welder, 1,400 ft. from E line, 400 ft. from N line of Sur. No. 73 ..... Rigging up.

Delange & Frates' No. 1 Sevier, 1,845 ft. from N line, 2,945 ft. from W line of Sur. 212 ..... T.D. 376 ft.; setting surface csg.

Frank Gravis' No. 3 Schallert in Sur. 255 (Palangano salt dome) ..... T.D. 1,403 ft.; testing.

O. W. Killam's No. 1 Peters, 150 ft. from E line, 450 ft. from N line of SE of Sur. No. 1 ..... T.D. 2,725 ft.; standing.

J. A. Leindecker's No. 1 G. W. Sutherland, 560 ft. from S line, 450 ft. from W line of Survey No. 183 ..... Spudded in and S.D.

Payne & Vernon's No. 1 A. Roach, 865 ft. from E line, 45 ft. from S line of Blk. 7, Sur. No. 457 ..... Rigged up.

C. L. Smith's No. 1 Sutherland, 150 ft. from S and W lines of Sur. 186, 4 miles SW of Sarnosa Pool. ..... Location.

FRIO COUNTY

Amerada Pet. Corp.'s No. 1 Halff & Oppenheimer, 1,200 ft. from N line, 200 ft. from E line of W. F. Halsel Sur. ..... T.D. 640 ft.; drlg.

GUADALUPE COUNTY

B. E. Brock's No. 1 Ogletree, 1,600 ft. from W line, 450 ft. from S line of tract in Robert Smith Sur. ..... T.D. 1,785 ft.; drlg.

Owen & Gunby's No. 1 C. F. Appling, 1,303 ft. from NE line and 150 ft. from NW line of Shell 50-ac. lease in Samuel Highsmith Sur. ..... Location.

Keene & Russell's No. 1 Lowman, 300 ft. from E line, 350 ft. from N line of tract in George Allen Sur. ... T.D. 200 ft.; drlg.

H. A. Suttle's No. 1 O. J. Haim, 150 ft. from N line, 1,900 ft. from E line of 331-acre tract in J. Kent Sur. ..... Rigged up; waiting for water.

GOLIAD COUNTY

Hoffman & Gooch's No. 1 Fromme, 600 ft. from N and 1,200 ft. from W line of Peter B. Dexter Sur. ..... T.D. 2,470 ft.; standing.

Plymouth Oil Co.'s No. 2 Parks, 400 ft. S of No. 1 Parks in Solomon Parks Sur. ..... T.D. 5,440 ft.; abnd.

Rowan & Hope and Phillips Pet. Co.'s No. 1 Irby, 6,500 ft. from E line, 3,000 ft. from N line of 2,080-ac. tract in Ybarbo Sur. ..... T.D. 1,000 ft.; standing.

GONZALES COUNTY

Luling Oil & Gas Co.'s No. 1 J. L. Dubose, 870 ft. from S line, 450 ft. from E line of 100-ac. tract out of 295-ac. tract in F. R. Whitner Sur. ..... T.D. 2,100 ft.

Edmiston & Kirby Pet. Co.'s No. 1 J. W. Ward, Jr., 300 ft. from N line, 833 ft. from W line of tract in Dan McKay Sur. ..... T.D. 1,592 ft.; standing.

HIDALGO COUNTY

Barrett-Kanellos' No. 1 J. B. Brock, 7 miles W and N from Mission (on Monte Cristo road) ..... T.D. 4,590 ft.; S.D.

San Roman Oil Co.'s No. 1 J. T. Lomax, 7,500 ft. from S and E lines of San Roman Sur. ..... T.D. 675 ft.; S.D.

Dayle L. Smith's No. 3 Daskam, SW part of county ..... T.D. 1,726 ft.; S.D

JIM HOGG COUNTY

Clark & Cowden's No. 1 E. Vela, Share 1 El Peyote grant. Rigging up.

D. C. DeWitt's No. 1 Gomez, 1,110 ft. from N line, 150 ft. from W line of Sur. No. 12, SW part of county ... T.D. 1,457 ft.; to drill deeper.

Jack Tarver's No. 1 Martinez, 300 ft. from E line, 1,600 ft. from N line of Sur. No. 623 ..... Rigging up.

JIM WELLS COUNTY

Catlett & O'Neal's No. 2 H. D. Miller, 2,200 ft. N and 83 deg. E of most southwesterly cor. of ranch ..... T.D. 3,200 ft.; drlg.

F. A. Lain's No. 1 Vernon Porter, 800 ft. from S line, 400 ft. from W line of 200-ac. tract in Sur. 25 ..... Derrick rebuilt, resumed drlg.

Mid-States Oil & Gas Co.'s No. 1 Wade, C Blk. 3, Wade ranch, NE part of county ..... Location temp. abnd.

KARNES COUNTY

A. E. Edmiston's No. 1 O. L. Cochran, 150 ft. from S line, 500 ft. from E line of farm in D. B. McConnell Sur. ..... T.D. 2,014 ft.; drlg. at 1,600 ft. In sidetracked hole.

Ike Howeth et al's No. 1 D. Pargmann in Victor Blanco Sur., 660 ft. NE along county road from NE cor. of P. Heer tract, thence 50 ft. NW at right angles .. T.D. 4,312 ft.; drlg.

Eastland Oil Co.'s No. 1 Love, 600 ft. E of No. 1 Love in J. Martinez Sur. No. 1,594 ..... T.D. 3,427 ft.; drlg.

Evans & Gant's No. 1 E. Young, A. E. Burg Sur. 28 .... T.D. 1,312 ft.; standing.

Verde O. & G. Co.'s No. 1 J. D. Witt, 1,320 ft. from N line, 1,320 ft. from W line of Sec. 1,923, Hamilton Sur., 4 miles from Center Point; T.D. 200 ft.; carried to this depth and abandoned as Herber Oil Co.'s No. 1 J. D. Witt ..... T.D. 110 ft.; standing.

KLEBERG COUNTY

Harris et al's No. 1 Dennett, north of Kingsville Field... Moving in rig.

H. Carter's No. 1 R. H. Simmons, 150 ft. from S and W lines of tract in Sec. 7, King Sur. No. 3 ..... T.D. 3,305 ft.; resuming drlg.

LIVE OAK COUNTY

J. H. Durbin's No. 1 Marbach, 1,900 ft. from W line, 425 ft. from SE line of tract in S. Hayes Sur. ..... T.D. 600 ft.; drlg.

J. A. Harper's No. 1 fee, 2,130 ft. to N line, 510 ft. to E line of farm, J. Pointevant Sur. 37 ..... T.D. 800 ft.; drlg.

LEE COUNTY

Paton Bros.' No. 1-A Turner, 24 ft. from No. 1 Turner ... T.D. 5,674 ft.; fishing.

McMULLEN COUNTY

Andy Lacey et al's No. 1 Hagist, 320 ft. from N and W lines of R. W. Mills Sur. No. 467 ..... Spudded in.

MEDINA COUNTY

James Earle Greenlee's No. 1 J. P. Nixon, 150 ft. S of C of N line of S half of NW of M. Derunge Sur. No. 528 ..... T.D. 1,100 ft.; set csg.

Robertson Drilling Co.'s No. 1 Little, 2,350 ft. from N line, 1,500 ft. from E line of E. B. Rutledge Sur., southern part of county ..... T.D. 2,682 ft.; drlg.

F. Ryal's No. 1 G. Martin, 150 ft. from S and W lines of Blk. 368, H. Castro Sur. ..... Location.

MILAM COUNTY

Bridwell's No. 1 Terry, 1,100 ft. from N line, 800 ft. from W line of tract in Jose Leal Sur. ..... T.D. 750 ft.; drlg.

M. W. Eiser's No. 1 Citizen's Nat. Bank of Waco, 1,325 ft. from S line, 625 ft. from E and W lines of tract in Wm. Punchard Sur. ..... T.D. 1,842 ft.; reaming.

Glass et al's No. 1 Ellison, 700 ft. from N line, 1,350 ft. from W line of 200-acre tract in Samuel Frost Sur. .. T.D. 2,350 ft.; drlg.

Keyser & Roberts' No. 3 Ward, 125 ft. NE of No. 2 Ward, in Levi Taylor Sur. ..... T.D. 1,315 ft.; S.D.

Michalk & Clark's No. 1 Johnson, 60 ft. S of No. 1 Johnson on 100-ac. lease in Juan Jose Acosta Sur. .. T.D. 2,137 ft.; S.D.

M. C. Moore et al's No. 1 H. A. Camp, east of San Gabriel ..... Set surface casing.

Wilder, Van Huss & Edilston's No. 1 Von Groton in M. J. Delgado Sur. ..... T.D. 2,475 ft.; drlg.

STARR COUNTY

Coastal O. & G. Co.'s No. 1 Kelsey Bass, 448 ft. to N line, 150 ft. to W line of Tract 52, Sur. 2, Porcion 86. T.D. 1,270 ft.; drlg.

Frank Dawson's No. 2 R. E. Margo, 200 ft. from S line, 403 ft. from E line of Blk. 6, Porcion 70, Jurisdiction of Mier ..... Spudded in.

L. W. Connor's No. 1 Sanchez, cen. of Sur. 344 ..... Rigging up.

W. T. Gilman & Travelers Oil Co.'s No. 1 C. Ramos, 1,170 ft. from SW line, 1,470 ft. from NW lines of Sur. No. 150 ..... Spudded in and S.D.

Hardin et al's No. 1 V. G. de Guerra, 2,994 ft. from NE line, 150 ft. from NW line of 1,000-ac. tract in Porcion 56 ..... Abnd. location.

H. C. Harter's No. 1 Gonzales, 990 ft. from N line, 1,150 ft. from E line of Share 62-B of Subd. of Porciones 70 and 71, Jurisdiction Mier ..... T.D. 410 ft.; standing.

Jeffries and Lambeth Drilling Co.'s No. 1 Starr County Cattle Co., 11,572 ft. from N line, 2,490 ft. from E line of Porcion 89, Jurisdiction of Camargo ..... Rigging up.

Lackawanna Oil Corp.'s No. 1 V. Guerra, 657 ft. from NE line, 763 ft. from SE line of Blk. 12, Subd. of 2,000-acre tract out of Porciones 55 and 56 ..... Location.

Matthew & Chitty's No. 1 R. E. Monroe, 400 ft. from E line, 280 ft. from S line of tract in Share 3-B, Porcion 70 ..... T.D. 175 ft.; drlg.

Morrison et al's No. 1 V. G. Guerra, 1,980 ft. from SW line, 450 ft. from SE line of Sur. No. 23 ..... T.D. 369 ft.; set csg.

John Pope, trustee's No. 2 H. Gonzales, 150 ft. W of cen. of E line of Sur. No. 339 ..... Location.

Raddig, Davis & Bowers' No. 1 M. Guerra in Porcion 110 ..... T.D. 275 ft.; standing.

Smith et al's No. 1 Lopez, 200 ft. from E line, 1,000 ft. from S line of Blk. 20, Share 65 of Porcion 80, Jurisdiction Camargo ..... T.D. 575 ft.; drlg.

George Stobaugh's No. 1 Seabury et al, 150 ft. from S and W lines of Porcion 107 ..... T.D. 278 ft.; drlg.

Stryalls Oil Corp.'s No. 1 H. Garza, 500 ft. from E line, 5,280 ft. from N line of Share 26, Partition of Porciones 67-72 ..... T.D. 390 ft.; standing.

E. L. Williams' No. 1 L. G. Madrigal, 150 ft. from N and W lines of Share 5-A of Porcion 72 of Jurisdiction of Mier ..... T.D. 332 ft.; drlg.

TRAVIS COUNTY

Fritz Fuchs' No. 1 Swedish, 2,350 ft. from NE line, 750 ft. from NW line of Thomas Smith Sur. ..... T.D. 1,598 ft; S.D.

Ray & Orth's No. 1 Lundgren, 550 ft. from N line, 150 ft. from W line of 133-ac. tract in L. Kimbro Sur. .. T.D. 550 ft.; fishing.

WEBB COUNTY

Blair & Livingston's No. 1 J. M. Garcia, 150 ft. from N and E lines of NE NW of Sur. 1,100 ..... Location.

O. W. Killam's No. 2 Hoggterp, 590 ft. from NE line, 265 ft. from SE line of Blk. 6, Sur. 1,110 ..... T.D. 1,512 ft.; going on pump.

O. W. Killam's No. 4 Hoogterp, 490 ft. from S line, 935 ft. from E line of Blk. 12, Sur. 1,110 ..... T.D. 1,270 ft.; drlg.

Newton Drilling Co.'s No. 1 A. Garcia, 2,550 ft. from S line, 2,340 ft. from W line of Sur. No. 52, 2 miles SW of Carolina Texas Field ..... T.D. 1,700 ft.; drlg.

Norden & Morris' No. 3 Gates, 2,500 ft. from E line, 3,400 ft. from S line of Survey No. 116 ..... T.D. 1,140 ft.; drlg.

Thompkins et al's No. 1 Ortiz, 200 ft. from E line, 2,000 ft. from N line of Sur. No. 1,808 ..... T.D. 930 ft.; standing.

WILLIAMSON COUNTY

Burns et al's No. 1 E. G. Edge, 360 ft. from SE line, 267 ft. from SW line of 94-acre tract on Simon Miller Sur. ..... T.D. 1,800 ft.; S.D.

McLean et al's No. 2 R. C. Miller, 800 ft. to S line, 100 ft. to W line of tract in B. Manlove Sur. ..... T.D. 740 ft.; S.D.

McNeil & Orth's No. 1 Joe Littleton, 800 ft. from W line, 150 ft. from N line of H. Good Sur. ..... Abnd. in chalk.

M. L. Vaughn's No. 1 Merrell, 300 ft. from S line, 500 ft. from E line of tract in G. W. Glasscock Sur. ..... Location.

WILSON COUNTY

A. M. Blume's No. 1-A Nicholson, 105 ft. N, 27 deg. E of No. 1 Johnson ..... T.D. 900 ft.; tested dry.

ZAPATA COUNTY

Ballard & Mercer's No. 1 Flores, 500 ft. from NE line, 580 ft. from SE line of Blk. 27, Porcion 37 ..... T.D. 2,505 ft.; standing.

Joe Cullinan's No. 1 E. Gutierrez, 1,992 ft. from NE line, 2,303 ft. from SE line of Charco de la India grant ..... T.D. 1,725 ft.; drlg.

Donohoo et al's No. 1-A Garcia, 150 ft. from NE and SE lines of Blk. 7 of Subd. of 700-ac. of Share A, Charco Redondo grant ..... T.D. 937 ft.; drlg.

Huff & Fudge's No. 1 Uribe, 150 ft. from NW and SW lines of Blk. 8, Share 7, Partition 6, San Ignacio Subd. of Borrego grant ..... T.D. 300 ft.; standing.

Hunt & Polk's No. 1 H. Ramirez, 7,075 ft. N of S cor. and 2,918 ft. from W line of Share A of Villa grant.. T.D. 860 ft.; standing.

Hynes & Nesaly's No. 1 Pablo Trevino, 4,829 ft. from NE line, 150 ft. from SE line of 1,066-ac. tract in Charco Redondo grant ..... T.D. 710 ft.; drlg.

F. J. Ossenbeck's No. 1 Adelfonso Rameris, 600 ft. W of Zapata-Roma highway, 150 ft. from SE line of Porcion 18 ..... Location.

H. L. Sargent et al's No. 1 Antonio Gutierrez heirs, 922 ft. from W line, 472 ft. from S line of Tract 3, Blk. 5, Nixon Subd., Porcion 10, San Ignacio Borrego grant ..... T.D. 1,210 ft.; coring.

F. J. Searight's No. 1 F. Munoz, 660 ft. from N line and on line between Blks. 81 and 82 of Searight Subd. of Porcion 18 ..... T.D. 280 ft.; abnd.

Stevens & Pope's No. 1 Martinez, 150 ft. from S and E lines of Blk. 95, C. H. Sprague Subd. of Sur. 434 .... T.D. 200 ft.; drlg.

Southwest Texas Proven Areas

Week Ending September 2

NORMANNA POOL—BEE COUNTY

Gulf Coast Oil Co.'s No. 5 Hicks, 600 ft. E of Nichols Oil Co.'s No. 3 Hicks ..... Moving in.

NORTH PETTUS POOL—BEE COUNTY

Gulf Coast Oil Co.'s No. 4 Ray McKinney, 450 ft. due E of No. 3 Ray McKinney ..... Set surface csg.

TULETA POOL—BEE COUNTY

Coquat & Hawn's No. 1 Harris, 1,000 ft. SE of Nichols' No. 1 Harris ..... T.D. 4,090 ft.; swabbing.

John O'Neil & C.R.M. Drlg. Co.'s No. 1 Harris, 330 ft. from S and E lines of SW SE Sec. 3, Ragsley Subd. of Jose Uranga Sur. ..... T.D. 4,109 ft.; salt water plugging back.

Nichols and C.R.M. Drlg. Co.'s No. 2 Harris, 250 ft. from S and E lines of Blk. 7, Sec. 2 of Ragsley Subd. of Uranga Sur. ..... Moving in.

L. L. Smith's No. 1 Harris, cen. Lot 14, Sec. 13, Ragsley's Sub. of Bee County ..... Spudded in.

The Texas Co.'s No. 1 Cox, west offset to Nichols' No. 1 Harris ..... T.D. 4,130 ft.; comp. 40,000,000 ft. gas; 1,525 lbs.

The Texas Company's No. 2 Cox, 250 ft. from S and W lines of SE of SW of SW of Sec. 2, Ragsley Subd. of Uranga tract ..... Location.

GAS RIDGE—BEXAR COUNTY

American Gas Co.'s No. 5 W. H. Kennon, 1,750 ft. from S line, 2,000 ft. from E line of 400-acre tract in Maria F. Rodriguez Sur. ..... T.D. 2,233 ft.; standing.

ECKERT POOL—BEXAR COUNTY

Alamo Nat. Gas Co.'s No. 3 J. H. Gembler, 180 ft. from N and E lines of tract in A. Manachaca Sur. 51. T.D. 1,416 ft.; drlg.

E. M. Carl's No. 1 F. Gembler, 160 ft. from N line, 750 ft. from E line of tract in J. Montes Sur. ..... T.D. 825 ft.; moving in heavy rig.

F. H. Eckert & Son's No. 1 Louis Brehm, W offset to No. 3 John J. Brehm ..... Location.

Gatlin Oil Co.'s No. 15 I. A. Beck, 150 ft. from S and E lines of tract in J. Montes Sur. ..... Location.

W. R. Swearingen's No. 11 Halbardier, 400 ft. SE of No. 10 Halbardier, J. F. Peres Sur ..... Location.

H. H. Weinert's No. 1 A. J. Gembler, 848 ft. from NE line, 150 ft. from NW line of tract in J. Montes Sur. ..... T.D. 853 ft.; abnd dry.

ALTA MESA POOL—BROOKS COUNTY

Ed East's No. 3 Randolph Garcia, 1,000 ft. from S line, 200 ft. from W line of 2,161-ac. tract in La Escantada grant ..... Location.

DUNLAP POOL—CALDWELL COUNTY

Cole et al's No. 1 Pierce, 400 ft. from NE line, 445 ft. from NW line of Pierce 100 ac. tract in Solomon Seal Sur. ..... Derrick on ground.

Hicks-Richey's No. 1 Pierce, 300 ft. S of Bob Rose's No. 1 Walker ..... Drilling.

Bob Rose's No. 2-B Walker 46-acre tract, 300 ft. from NW line, 500 ft. from SW line of tract in Solomon Seal Sur. ..... Location.

SALT FLATS—CALDWELL COUNTY

Hickman et al's No. 1 C. A. Dickerson, 150 ft. N of cen. of S line of tract in John D. Rains Sur. ..... Spudded in and S.D.

WEBSTER POOL—CALDWELL COUNTY

C. J. Webster Oil & Gas Co.'s No. 1 C. F. Robertson, 700 ft. from E line, 200 ft. from N line of 100-ac. tract, John A. Neill Sur. ..... Derrick.

NORTH GOVERNMENT WELLS—DUVAL COUNTY

F. J. Bisconet and Wm. McGinley's No. 1 Lundell, 150 ft. from E line, 660 ft. from S line of Sur. No. 48 ..... T.D. 2,314 ft.; show oil; testing.

R. F. Byrd's No. 2 Wright, 330 ft. from S and W lines of Sur. No. 101 ..... Rigging up.

R. F. Byrd's No. 1 R. T. Wright, 150 ft. from N and W lines of Sur. 101 ..... T.D. 2,250 ft.; comp. 2,500,000 ft. gas.

H. H. Coffield's No. 3 Wendt, 150 ft. from N and E lines of SE of NE of Sur. No. 43 ..... T.D. 1,250 ft.; drlg.

Hamil & Hamil's No. 1 C. W. Hahl, 330 ft. from S and W lines of N half of SE of Sur. No. 42 ..... Location.

Highland Oil Co.'s No. 1 Lundell, 330 ft. from S and W lines of S half of NE of Sur. No. 42 ..... Location.

Luse & Russ' No. 2 Hahl, 330 ft. from N and W lines of lease in Sur. 46 ..... Rigged up.

Magnolia Pet. Co.'s No. 6 Wendt, 870 ft. from N line, 150 ft. from W line of SW of NW of Sur. No. 44. ... T.D. 1,800 ft.; drlg.

George Parr's No. 1 Benavides School, 150 ft. from S and W lines of Sur. No. 44 ..... T.D. 2,288 ft.; set csg.

San Diego Oil Co.'s No. 1 Heller, 330 ft. from N and W lines of SW of SE of Sur. No. 44 ..... T.D. 2,349 ft.; plugged back to 2,320 ft.; complete 100 bbls. daily.

San Diego Oil Corp.'s No. 2 Riley, 150 ft. from N and E lines of NW NW Sur. No. 44 ..... T.D. 2,303 ft.; comp. 800 bbls.

San Diego Oil Co.'s No. 3 Riley, 340 ft. W of No. 2 Riley, 230 ft. from N line of NW of NW of Sur. 46.. T.D. 2,296 ft.; set csg.

San Diego Oil Co.'s No. 3 L. Bennett, 330 ft. from N and W lines of NE of SW of Sur. 44 ..... Moving in.

Seacord & Putnam's No. 1 Johnson, 150 ft. from S and W lines of NW NW, Sur. 44 ..... T.D. 2,313 ft.; comp. 960 bbls.

Southwest Drilling Co.'s No. 2 Wendt, 450 ft. from S line, 150 ft. from E line ..... T.D. 2,262 ft.; comp. 720 bbls.

The Texas Co.'s No. 1 C. W. Freer, 150 ft. from S and E lines of SE NE, Sur. No. 45 ..... Location.

The Texas Co.'s No. 2 Riggs, 810 ft. from N line, 330 ft. from W line of NE NW of Sur. No. 46 ..... T.D. 2,279 ft.; comp. 20 bbls. hrly.

Whisenant, Trenchard and French's No. 2 Hahl, 462 ft. from E line, 330 ft. from S line of SW SW of Sur. No. 44 ..... T.D. 2,297 ft.; set csg.

Whisenant, Trenchard and French Oil Co.'s No. 3 Hahl, 620 ft. from S line, 250 ft. from E line of SW of SW of Sur. No. 44 ..... Location.

SOUTH GOVERNMENT WELLS POOL—DUVAL COUNTY

Humble Oil & Ref. Co.'s No. 6 White, 1,650 ft. from W line, 2,970 ft. from S line of Sur. No. 58 ..... T.D. 2,317 ft.; fishing.

COLE POOL—DUVAL COUNTY

Cole Pet. Co.'s No. 77 Benavides in Blk. 18, Sur. 19, of Cole Subd. of Arispe grant ..... Location.

S.R.C. POOL—DUVAL COUNTY

S.R.C. Oil Co. and Magnolia Pet. Co.'s No. 8 Duval County Ranch Co., 500 ft. N and 200 ft. W of No. 7.. Spudded in.

SARNOSA POOL—DUVAL COUNTY

Edwin M. Jones' No. 1 J. F. Williams, 3,156 ft. from NE line, 150 ft. from NW line of Sur. No. 121 ..... T.D. 2,300 ft.; drlg. plugs.

Sarnosa Oil Corp.'s (Hynes & Nessly) No. 2 Well, 400 ft. SW of No. 1 Well ..... Coring for sand.

The Texas Co.'s No. 1 R. L. Brown, 635 ft. from SE and SW lines of N quarter of Sur. No. 574 ..... T.D. 1,150 ft.; drlg.

John F. Camp's No. 2 Well, 1,200 ft. N, 18 deg. W of No. 1 Well in Sur. No. 570 ..... Set surface csg.

Smith & Capps' No. 4 Duval County Ranch Co., Sur. 576.. T.D. 2,340 ft.; set csg., waiting on cement.

Sun Oil Co.'s No. 2 Cuellar (Cano), 150 ft. from SW and SE lines of E¼ of Sur. No. 576 ..... Derrick.

Thomas & Tarver, Inc.'s No. 2 Duval County Ranch Co., 660 ft. NW of No. 1 ..... Location.

SLICK POOL—GOLIAD COUNTY

Slick-Seeligson, Inc.'s No. 3 Allen, 1,650 ft. from NE and SE lines of tract in Obid Marshall Sur. ..... T.D. 4,290 ft.; abnd.

SAL-MAR FIELD—GUADALUPE COUNTY

Sal-Mar Oil & Gas Co.'s No. 1 Hempel, 1,600 ft. from S line, 150 ft. from E line of tract in G. W. Williams Sur. ..... Rigging up.

George E. Smith's No. 1 Behring, 1,250 ft. from E line, 150 ft. from N line of G. W. Williams Sur. .... T.D. 2,023 ft.; tested dry.

A. W. Wormser's No. 1 Pfuilman, 450 ft. W of Sal-Mar Oil Co.'s No. 1 Zunker in L. Bollinger Sur. ..... T.D. 2,365 ft.; abnd.

A. W. Wormser's No. 1 Harris, 150 ft. from N line of tract and 150 ft. E of creek in Green Dewitt Sur..... Derrick.

SANDIA POOL—JIM WELLS COUNTY

Larero Gas & Pet. Co.'s No. 3 Wade, 2,000 ft. S, 33 deg. W of No. 2 Wade, thence 1,970 ft. N, 57 deg. W ..... Material on ground.

JACOB POOL—McMULLEN COUNTY

Jacob, Buxzini & Pickett's No. 6-A Jacob, 1,320 ft. S, 15° W of No. 3-A ..... Rigging up.

Jacob, Buxzini & Pickett's No. 5-A Jacob, 1,320 ft. S, 15 deg. W of No. 4-A, in W. H. Jacob Sur. No. 19.. T.D. 960 ft.; comp. 100 bbls.

Longhorn Oil Co. and American Gas Co.'s No. 1 Lark, 2,790 ft. from N line, 1,150 ft. from W line of Lark tract, E.W.B. Scrugham Sur. ..... T.D. 755 ft.; drlg. shale.

WENTZ POOL—McMULLEN COUNTY

V. G. Schimmel's No. 1 Two Rivers Ranch, SE cor. of Sec 59, 5 miles S of Wentz ..... T.D. 1,654 ft.; abnd.

V. G. Schimmel's No. 2 Two Rivers Ranch Co., 100 ft. E of No. 1 ..... Skidding rig.

ADAMS FIELD—MEDINA COUNTY

Yantis Oil Co.'s No. 1 Adams, 420 ft. from S line, 2,000 ft. from W line of F. Mumme Sur. ..... T.D. 179 ft.; setting surface csg.

SAXET FIELD—NUECES COUNTY

Houston Oil Co.'s No. 1 Walton, 170 ft. from N line, 230 ft. from E line of 500-ac. tract ..... Derrick.

Houston Oil Co.'s No. 2-A Harrell, 1,112 ft. from N line, 170 ft. from W line of Sec. 28, Sheppard farm lots ..... T.D. 3,650 ft.; drlg.

Gulf Coast Oil Co.'s No. 2 Perkins & Gasse, 650 ft. from N line, 990 ft. from E line of Sec. 26 of Shepherd farm lots ..... T.D. 4,851 ft.; fishing.

Gulf Coast Oil Co.'s No. 1 Frank Bliss, 330 ft. from S and E lines of N half of 225-ac. tract ..... T.D. 4,533 ft.; comp. 250 bbls.

Gulf Coast Oil Co.'s No. 2 Bliss, 660 ft. W of No. 1 Bliss.. Rigging up.

Gulf Coast Oil Co.'s No. 1 W. L. Dinn, 330 ft. from N and E lines of lease in School Sur. No. 412 ..... Location.

Kepley et al's No. 2 Roark, 150 ft. from S and W lines of Roark lease ..... Rigging up.

McCarthy-Rogers-Nix et al's No. 1 Isencee, 151 ft. from W line, 172 ft. from N line of Blk. 12 of Shepherd farm lots ..... T.D. 4,533 ft.; testing.

LOS OLMOS POOL—STARR COUNTY

V. V. Combs' No. 1 Kelsey Bass, 150 ft. from N and W lines of NE NE, Sec. 6, Porciones 75, 76 and 77 .... Location.

Frank Doyno's No. 1 Seabury, 450 ft. from S line, 815 ft. from E line of 80-ac. tract in Share 5, of W portion of Porcion 75 ..... Spudded in and S.D.

Felder, Mitchell & Barnsley's No. 1 Kelsey Bass, 450 ft. from N and W lines of SE SW, Sec. 8, Kelsey Bass Subd. of Porcions 75, 76 and 77 of Jurisdiction of Camargo ..... T.D. 337 ft.; comp. 10 bbls.

Hooks & Weaver's No. 11 Kelsey Bass, 150 ft. from N line, 500 ft. from E line of NW NE, Sec. 8, Kelsey Bass Subd. ..... T.D. 475 ft.; testing.

Hooks & Weaver's No. 13 Kelsey Bass, 150 ft. from N line, 400 ft. from E line of NW of NE of Sec. 8, Subd. of Porcions 75, 76, 77 in Jurisdiction Camargo.. Location.

W. E. Hopper's No. 3 Kelsey Bass, 150 ft. from E line, 365 ft. from S line of Sec. 6 ..... Dropped; duplicate of Rio Oil & Gas Co.'s No. 3 Kelsey Bass.

J. P. Moore and C. B. Van Matre's No. 1 Seabury et al, 150 ft. from E line, 750 ft. from S line of Share 5, Subd. of W part of Porcion 75 ..... T.D. 50 ft.; drlg.

Griffin et al's No. 1 Bass, 150 ft. from N and W lines of NW NW Sur. 11, Subd. Porciones 75, 76, 77 ..... T.D. 1,465 ft.; abnd.

Munday Bros.' No. 1 Seabury, 840 ft. from E line, 4,550 ft. from S line of Share 5, Subd. of W two-thirds of Porcion 75, Jurisdiction of Camargo ..... Rigging up.

Rio Oil & Gas Co.'s No. 3 Kelsey Bass, 150 ft. from W line, 365 ft. from S line of W 10-ac. tract of NE SW Sec. 6 ..... T.D. 445 ft.; comp. 15 bbls.

Rio Oil & Gas Co.'s No. 2 Kelsey Bass, 150 ft. from S and W lines of NW SE Sec. 6, Subd. of Porciones 75, 76, 77 ..... T.D. 475 ft.; waiting on cement.

Rio Oil & Gas Co.'s No. 4 Kelsey Bass, 150 ft. from E line, 670 ft. from S line of W 10-ac. of NE SW Sec. 6, Subd. of Porciones 75, 76, 77 ..... T.D. 452 ft.; comp. 25 bbls.

Sinclair & Rutherford's No. 1 Kelsey Bass, 150 ft. from S and W lines of SE NW Sec. 6, Subd. of Porciones 75, 76, 77 ..... T.D. 430 ft.; in cavity.

Tarver & Nance's No. 5 Kelsey Bass, 450 ft. from S line, 750 ft. from W line of SW SE, Sec. 7 of Subd. of Porcions 75, 76 and 77, Jurisdiction of Camargo .T.D. 441 ft.; comp. 40 bbls.

RIO GRANDE CITY POOL—STARR COUNTY

Hoffman & Flowers' No. 1 Goodrich, 160 ft. from N line, 450 ft. from W line of Blk. 6, Tract 5, Partition of Porcions No. 80 and 81 ..... Derrick.

Heard & Swift's No. 3 Frank Doyno, 450 ft. from S and E lines of Blk. 8, Share 77-A of Porcions 80 and 81, Jurisdiction of Camargo ..... T.D. 1,504 ft.; abnd.

Jack Myers' No. 2 Doyno, 500 ft. from S line, 850 ft. from W line of Blk. 4, Share 77-2, Subd. of Porciones 80 and 81, Jurisdiction of Camargo ..... Rigging up.

S. S. Smith's No. 1 O'Meara in Share 76 in W half of Porcion 79, Jurisdiction Camargo ..... T.D. 1,650 ft.; no report.

E. D. Traylor's No. 1 Doyno, 150 ft. from S and W lines of W half of Blk. 7, Share 77-A of Porciones 80 and 81 ..... T.D. 2,427 ft.; abnd.

ROSENBERG POOL—WEBB COUNTY

Montex Oil Co.'s No. 1 M. Vela, 479 ft. from N line, 490 ft. from W line of Blk. 4, Sur. No. 267 ..... Derrick.

South Texas Oil Co. (Rosenberg) No. 8 Laurel, 150 ft. from S line, 450 ft. from E line of Blk. 10, Sur. 271.. T.D. 2,242 ft.; set csg.

WEST COLE POOL—WEBB COUNTY

French Oil Corp.'s No. 1 Rosa Benavides, 450 ft. from S and W lines of Sur. No. 659 ..... T.D. 2,331 ft.; comp. 60 bbls.

ESCOBAS POOL—ZAPATA COUNTY

Allied Oil & Gas Co.'s No. 37 Gutierrez, 3,131 ft. from NE line, 491 ft. from SE line of Share 4, Comitas grant ..... T.D. 1,464 ft.; set csg.

F. M. Blair & Son's No. 1 Montemayor, 450 ft. from N line, 150 ft. from E line of Blk. 1, Sur. 62 ..... T.D. 1,723 ft.; standing.

McGinley Oil Corp.'s No. 1 G. T. Montemayor, 150 ft. from N and W lines of Blk. 6, Sur. 64 ..... Location.

S.R.C. Oil Co.'s No. 13-B Cuellar in Blk. 12, Sur. 64 ..... T.D. 975 ft.; drlg.

The Texas Company's No. 12 Measles, 1,724 ft. from SE line, 17,995 ft. from SW line of Cerrito Blanco grant.. Derrick.

S.R.C. Oil Co.'s No. 14-B Cuellar, 94 ft. from NE line, 883 ft. from NW line of Blk. 11, Sur. No. 65 ..... Set casing.

Trevino Oil Corp.'s No. 16-A I. G. Trevino, 150 ft. from N and E lines of Blk. 5, Sur. No. 65 ..... T.D. 800 ft.; drlg.

CHARCO REDONDO POOL—ZAPATA COUNTY

L. G. Smith's No. 1 J. M. Martinez, 350 ft. from NE and SE lines of Blk. 18, Share B, Dunke's Subd. of Charco Redondo grant ..... Location.

Windsor Oil Co.'s No. 1 Martinez, in NE of Blk. 16, of W. R. Duke Subd., Charco Redondo grant ..... T.D. 1,100 ft.; standing.

Wildcat Operations in Louisiana-Arkansas

(Continued from Page 57)

R. A. Keaton's No. 1 Bastrop State Bank, 200 ft. N and W, SE cor. NE NW, Sec. 17-10-6 ..... Location.

R. A. Keaton's No. 1 Stephens, Sec. 25-10-6, 330 ft. N and W. SE cor. NW NW ..... S.D. 1,700 ft.

Natchitoches Pet. Co.'s No. 1 Edenbarn, 2,240 ft. W. 1,320 ft. S, NE cor., Sec. 4-11-6W ..... Drlg. 402 ft.

H. W. Perritt's No. 1 Cook, 165 ft. E, 105 ft. N, SW cor. NE SW, Sec. 3-8-9 ..... S.D. 2,992 ft.

Sabine Bayou Dev. Co.'s No. 1,130 Caw, 330 ft. N and E, SW cor. SE, Sec. 9-12-5 ..... Drlg. 1,534 ft.
Texana Oil Co.'s No. 1 Clark-Morris Lbr. Co., 978 ft. N, 560 ft. E, C, Sec. 33-8-6 ..... S.D. 2,504 ft.

OUACHITA PARISH

Monroe Oil & Royalties Co.'s No. 1 Thieler, 150 ft. N and E, SW cor. SE NW, Sec. 34-18-2e ..... S.D. 1,950 ft.
Wilson & Mitchell's No. 1 Williams, Sec. 5-16-1e, 330 ft. E, 240 ft. S, NW cor. SW SE ..... S.D. 3,480 ft.

RED RIVER PARISH

C. F. Davis' No. 1 Pierson, 500 ft. S, 317 ft. E, NW cor. SW NW, Sec. 12-14-11 ..... Location.
Edward & Clay's No. 1 Delta Pecan Co., 1,600 ft. N, 450 ft. E, SW cor., Sec. 37-13-11 ..... Rigging up.
Lawrence Decker, tr.'s No. 1 Madden, 1,650 ft. S and W, NE cor., Sec. 31-14-10 ..... S.D. 2,700 ft.
La. Oil Dev. Co.'s No. 2 La. Delta Pecan Co., 2,950 ft. S, 300 ft. E, NW cor., Sec. 37-13-11 ..... Abd. 50 ft.

RICHLAND PARISH

National Gas Co.'s No. 1 Singletary, 1,980 ft. N, 660 ft. W, SE cor., Sec. 20-18n-7e ..... S.D. 2,515 ft.

SABINE PARISH

Adams & Roberson's No. 1 Peterson, 406 ft. N, 200 ft. W, SE cor. NE NE, Sec. 35-8-13 ..... S.D. 100 ft.
J. M. Bridges' No. 1 Moore, 660 ft. E, 330 ft. N, SW cor. NE NW, Sec. 5-9-12 ..... Drlg. 2,220 ft.
Bridwell O. & G. Co.'s No. 1 La. Long Leaf, 330 ft. N and W, SE cor. NE NW, Sec. 31-8-10 ..... S.D. for wtr. 1,000 ft.
R. E. Brooke's No. 1 A. Gray, 330 ft. N and W, SE cor. SW NE, Sec. 35-8-13 ..... Location.
V. V. Bull's No. 1 Henderson, 445 ft. S, 275 ft. E, NW cor. SE SE, Sec. 31-8-10 ..... S.D. for wtr. 1,450 ft.
John R. Bunn's No. 1 Sabine Lbr. Co., 295 ft. S, 386 ft. W, NE cor. SW NE, Sec. 9-7-13 ..... S.D. for wtr. 1,300 ft.
Byers et al's No. 1 Bishop, SW cor. SW NE, Sec. 16-7-13 ..... Derrick.
Cliff Oil Co.'s No. 1-A Martinez School, 720 ft. N, 105 ft. W, SE cor. NE SE, Sec. 4-7-13 ..... Pumping 40 bbls. 2,450 ft.
Clopton et al's No. 1 Campbell, 335 ft. S, 353 ft. W, NE cor. NW NE Section 5-7-11 ..... Fishing 2,557 ft.
Clopton et al's No. 1 Garcia, 330 ft. N and W, SE cor. SE NW Sec. 4-7-13 ..... Derrick.
W. M. Coates' No. 1 Gray, 330 ft. N and W, SE cor. SW, Sec. 3-7-13 ..... Location.
W. M. Coates' No. 2 Gray, 330 ft. S and W, NE cor. SE SW, Sec. 3-7-13 ..... Location.
Coates Pet. Co.'s No. 2 Stille, 330 ft. N and E, SW cor. SE SW, Sec. 35-8-11 ..... W.O.S.R. 2,465 ft.
Coates Pet. Co.'s No. 3 Stille, 330 ft. N and E, SW cor., Sec. 35-8-13 ..... Location.
Crescent Drlg. Co.'s No. 1 Williams, 370 ft. E, 330 ft. S, NW cor. N½ SW, Sec. 31-7-13 ..... Set 10-in. 40 ft; drlg. 1,500 ft.
Mark Curtis et al's No. 1 Sabine Lbr. Co., 330 ft. N and W, SE cor. NE SE, Sec. 35-8-13 ..... S.D. 2,019 ft.
B. Q. Daniels' No. 1 Armstrong, SE cor. SE NE, Sec. 31-8-10 ..... Derrick.
Mrs. Dabney's No. 1 Hill, 265 ft. N, 235 ft. W, SE cor. NE NE, Sec. 5-7-11 ..... Location.
Mrs. Dabney's No. 2 Hill, 330 ft. S, 235 ft. W, NE cor., Sec. 5-7-11 ..... Location.
R. E. Davidson's No. 1 Davis, 600 ft. S, 125 ft. E, NW cor., Sec. 28-7-11 ..... Drlg. 2,250 ft.
William DeSota's No. 1 Mooney, 350 ft. S, 395 ft. E, NW cor., Sec. 35-8-13 ..... Derrick—rig moved.
B. A. Ferrell's No. 1 Haley, Sec. 6-7-12, 300 ft. S and E, NW cor. NW SW ..... Drlg. 2,389 ft.
Flinchbaugh & Myers' No. 1 Aaron, 250 ft. S and E, NW cor., Sec. 32-9-13 ..... Rigging up.
Harry Flinchbaugh's No. 1 Sepulbedo, 250 ft. N and E, SW cor. SE NE, Sec. 4-7-13 ..... W.O.S.R. 2,424 ft.
R. L. Gay, tr.'s No. 1-A Long Bell Lbr. Co., 430 ft. S, 300 ft. W, NE cor. NW NW, Sec. 10-8-13 ..... S.D. 6,150 ft.
Gibson & Johnson, Inc.'s No. 1 Frost Lbr., 330 ft. S and E, from center Sec. 19-9-13 ..... Rigging up.
Gibson & Johnson, Inc.'s No. 2 Frost Lbr., 330 ft. S and W, NE cor. NW NE, Sec. 15-9-13 ..... Derrick.
W. N. Hankins' No. 1 Tilley, 200 ft. E, 30 ft. S, NW cor. SE SE, Sec. 30-8-12 ..... S.D. for wtr. 1,800 ft.
Helis et al's No. 1 Sabine State Bank, 350 ft. N and W, SE cor. SW SW, Sec. 28-8-11 ..... Set 10-in. 41 ft.
Heward et al's No. 1 Williams, 300 ft. N and E, SW cor. SE NW, Sec. 13-7-11 ..... Pumping 12 bbls. 2,580 ft.
Ab Jones' No. 1 Garcia, 200 ft. S and W, NE cor. NW SE, Sec. 4-7-13 ..... S.D. 1,980 ft.
G. E. Jordan's No. 1 Dew, 330 ft. N, 340 ft. E, SW cor. SW SE, Sec. 24-8-11 ..... S.D. for wtr. 950 ft.
H. P. Keys' No. 1 Travis, 467 ft. N, 147 ft. E, SW cor. NE NW, Sec. 13-7-11 ..... Set 10-in. 40 ft; drlg. 240 ft.
A. D. King, tr.'s No. 1 Davis, 170 ft. N, 410 ft. E, SW cor. NW NE, Sec. 29-7-11 ..... Location.
A. D. King, tr.'s No. 1 T. L. Andries, 200 ft. S, 300 ft. E, NW cor. SE SE, Sec. 15-7-11 ..... Derrick.
S. A. Lane et al's No. 1 DeKeyser, 233 ft. E, 330 ft. S, NW cor. NE, Sec. 23-7-11 ..... S.D.; W.O. 2,930 ft.
Geo. LeGrand's No. 1 McGough, Sec. 3-8-10 ..... S.D. 2,020 ft.
H. C. Maulding's No. 1 Moores, 330 ft. S and W, NE cor. SE NE Sec. 16-7-13 ..... S.D. 1,100 ft.
Paul L. Miller's No. 1 Luclus, 175 ft. N and W, SE cor. NE SW, Sec. 31-8-10 ..... T.A. 2,750 ft.
Paul L. Miller, tr.'s No. 1 Chadick, 550 ft. S, 178 ft. E, NW cor. NE SW, Sec. 32-8-10 ..... S.D. for wtr. 2,423 ft.
Ray Murray's No. 1 Lefkobits, 210 ft. S, 330 ft. W, NE cor., Sec. 5-7-13 ..... Drlg. 2,385 ft.
E. F. Neely's No. 1 Rains, 660 ft. N, 100 ft. W, SE cor., SW NW, Sec. 14-7-11 ..... W.O.S.R. 2,541 ft.
E. F. Neely's No. 1 Ponder, 150 ft. S and W, NE NE, Sec. 16-7-11 ..... Set 6-in. 2,370 ft.
W. M. Neely's No. 1 Buvens, 350 ft. S, 100 ft. E, NW cor. NE, Sec. 21-7-11 ..... Derrick pattern.
C. D. Neff, tr.'s No. 1 Snell, Sec. 9-7-11, 350 ft. N, 660 ft. W, SE cor. Sec. ..... W.O.S.R. 2,509 ft.
Palmer & Smitherman's No. 1 La. Long Leaf Lbr. Co., Sec. 12-7-11, 330 ft. S and E, NW cor. NE SE ..... Location abd.
Palmer & Smitherman's No. 2 La. Long Leaf Lbr. Co., 330 ft. S and W, NE cor. SE, Sec. 12-7-11 ..... Location abd.
H. W. Perritt's No. 3 Brown Lbr. Co., 519 ft. S, 455 ft. W, NE cor. NW NE, Sec. 31-8-10 ..... S.D. 140 ft.
Roy Raines et al's No. 1 Beard, 720 ft. E, 700 ft. N, SW cor. SW SE, Sec. 8-8-10 ..... Derrick.
Thornton et al's No. 1 S. S. Martinez, 355 ft. S, 330 ft. W, NE cor. SE NE, Sec. 4-7-13 ..... Testing 2,058 ft.
Otis A. Roberts' No. 1 Sabine Lbr. Co., 224 ft. S, 481 ft. W, NE cor. SW NE, Sec. 5-7-13 ..... S.D. 2,500 ft.
Robeste & Sledge's No. 1 Lefkobits, 346 ft. S, 673 ft. E, NW cor. SE NE, Sec. 5-7-13 ..... Derrick.
Robeste & Sledge's No. 2 Sabine Lbr. Co., 303 ft. W, 796 ft. N, SE cor. SE SW, Sec. 5-7-13 ..... Setting liner 2,480 ft.
Robeste & Sledge's No. 3 Sabine Lbr. Co., 413 ft. N, 479 ft. W, SE cor. SE SW, Sec. 33-8-13 ..... Derrick.
Bill Rowe's No. 1 Sepulbedo, 530 ft. N, 200 ft. E, SW cor. SE SE, Sec. 4-7-13 ..... S.D. 2,215 ft.
Skully & Beach's No. 3 Lafitte, 1,400 ft. S, 133 ft. W, NE cor. NW NW, Sec. 13-7-11 ..... Location.
Skully & Beach's No. 2 Lafitte, 149 ft. S, 231 ft. E, NW cor., Sec. 13-7-11 ..... Setting 2-in. tubing 2,486 ft.
R. R. Smith et al's No. 1 La. Long Leaf Lbr. Co., Sec. 13-7-11, 330 ft. S and W, NE cor. NW SW ..... Location.
W. W. Smith et al's No. 1 Sepulbedo, 330 ft. N, 350 ft. W, SE cor., Sec. 4-7-13 ..... W.O. 2,434 ft.
Sneed & Sneed's No. 1 Pearce, 300 ft. N, 315 ft. E, SW cor. NE SW, Sec. 35-8-13 ..... S.D.; W.O. 2,405 ft.
Southland Drlg. Co.'s No. 1 Frost Lbr. Co., 330 ft. N and W, SE cor. NE NE, Sec. 13-9-11 ..... S.D. 1,905 ft.
H. B. Stacey et al's No. 1 Hefkobits, 457 ft. N, 533 ft. E, SW cor. SE, Sec. 34-8-13 ..... Drlg. 1,620 ft.
State Prod. Co., Inc.'s No. 1-B Davis, 200 ft. N and E, SW cor., Sec. 17-7-10 ..... Derrick.
Supreme Oil Co.'s No. 1 Pruitt, 330 ft. N and E, SW cor. SE SW, Sec. 30-8-11 ..... Drlg. 2,050 ft.
B. E. Taylor's No. 1 Gay, 232 ft. S, 476 ft. E, NW cor. SE SW, Sec. 36-8-13 ..... Location.
B. E. Taylor's No. 1 Wooley, 330 ft. N and E, SW cor. SE SW, Sec. 36-8-13 ..... Location.
A. F. Tarver's No. 3 Cutrer, Sec. 13-7-11, 1,120 ft. E, 300 ft. N, SW cor. NW ..... W.O.S.R. 2,600 ft.
Thornton et al's No. 2 S. S. Martinez, 312 ft. E, 205 ft. S, NW cor. SE NE, Sec. 4-7-13 ..... Location.
A. A. Trammell's No. 1 Sepulbedo, 330 ft. N and W, SE cor. NW NE, Sec. 5-7-13 ..... Derrick.
Triangle Drlg. Co.'s No. 1 La.-Long Leaf Lbr. Co., 330 ft. N and W, SE cor. Sec. 11-6-11 ..... S.D. 4,013 ft.
Tuffree et al's No. 1 T. L. Andries, N½ NE SE, Sec. 15-7-11 ..... S.D. 100 ft.
C. C. Walker's No. 1 Noble-Neely, 330 ft. S and E, NW cor. SW, Sec. 36-8-13 ..... S.D. 1,750 ft.

TENSAS PARISH

H. V. Schumacker's No. 1 Currey, 1,320 ft. S, 1,320 ft. E, NW cor., Sec. 39-11-12 ..... S.D. 3,645 ft.

VERNON PARISH

Earl Jones' No. 1 Willis, 350 ft. N, 400 ft. E, SW cor. SE SE, Sec. 32-3n-9w ..... Derrick.
Llano Co-operative Colony's No. 1 fee, NW NE, Sec. 34-2n-9w ..... Drlg. 1,553 ft.

WEBSTER PARISH

George Pearce et al's No. 1 Ambrose, 200 ft. N and W, SE cor. SW SE, Sec. 22-20-10 ..... Drlg. 1,492 ft.

WINN PARISH

P.V.T. Oil Co.'s No. 1 Southern Paper Co., 150 ft. S and W, NE cor. SW, Sec. 26-13-3 ..... Drlg. 710 ft.

Arkansas

CLAY COUNTY

S. C. Jeffus' No. 1 Underwood, 510 ft. N, 350 ft. W, C, NW SE, Sec. 4-20-8 ..... 1,353 ft.

CLEBURNE COUNTY

Frank S. Craver et al's No. 2 Doniphan Lbr. Co., 700 ft. N, 200 ft. E, SW cor. SW, Sec. 34-11-9 ..... Drlg. 575 ft.

CLEVELAND COUNTY

Crum & Stillwell's No. 1 E. R. Bell, Sec. 10-10s-12 ..... Rigged up and S.D.

DALLAS COUNTY

J. H. James, tr.'s No. 1 Fordyce Lbr. Co., 200 ft. S, 200 ft. E, NW cor. SE, Sec. 11-9-15 ..... S.D. 2,575 ft.

DREW COUNTY

Co-Operative Dev. Co.'s No. 1 Ogles, Sec. 35-15-5, 330 ft. S and E, NW cor. NE NW ..... Drlg. 3,165 ft.

FRANKLIN COUNTY

Ozark Natural Gas Co.'s No. 1 Monroe, C NW NE, Sec. 13-8-29 ..... Drlg. 970 ft.

HOT SPRINGS COUNTY

Star Oil Co.'s No. 1 Cunningham, 285 ft. S, 285 ft. W, NE cor., Sec. 11-5-16 ..... S.D. 1,340 ft.

LINCOLN COUNTY

Lawrence Cook, tr.'s No. 1 McGhee Planting Co., 430 ft. S, 200 ft. W, NE cor. NE SW, Sec. 5-8-7 ..... Reaming 2,985 ft.

LITTLE RIVER COUNTY

Harrell et al's No. 1 Taffee, 32 ft. W, 630 ft. E, 330 ft. S, SW cor. W NW, Sec. 25-12s-32w ..... Drlg. 2,500 ft.

MILLER COUNTY

Duluth-Ark. Oil Co.'s No. 1 Stone, SE cor. SW, Sec. 32-14-26 ..... S.D. 2,535 ft.
Goodwin et al's No. 1 E. A. McCowand, NW cor. NW SE, Sec. 22-15-28 ..... Derrick pattern.
Fitzwater et al's No. 1 C. J. Norsen, SW cor. SE SW, Sec. 20-15-27 ..... Set 10-in. 121 ft.
Fitzwater et al's No. 1 Beck, Sec. 23-15-26 ..... 500 ft. oil in hole 2,932 ft.
Fitzwater et al's No. 1 Fouke, 150 ft. S and W, NE cor., Sec. 11-17-27 ..... Derrick.
W. E. Noel et al's No. 1 Dickson hrs., 1,980 ft. W, 660 ft. S, NE cor., Sec. 11-20-27 ..... S.D; W.O. 2,600 ft.

OUACHITA COUNTY

Copenhaven et al's No. 2 Berg, C SE SE, Sec. 13-15-17 ..... W.O.S.R. 2,208 ft.
McLean et al's No. 1 L. D. Neely, Sec. 23-15-16, 200 ft. N and W, SE cor. NE SW ..... S.D. 150 ft.
Chas. Steele et al's No. 1 Anderson, 155 ft. S, 150 ft. E, from center Section 36-12-18 ..... S.D. 525 ft.

PIKE COUNTY

E. R. Henderson's No. 1 J. L. Lee, 400 ft. S, 350 ft. E, NW cor. SW SE, Sec. 31-8-24 ..... S.D.; W.O. 1,020 ft.
E. R. Henderson's No. 1 W. B. East, 300 ft. S, 150 ft. W, NE cor., Sec. 13-9-23 ..... Rigging up on new hole.

PRAIRIE COUNTY

Powell Creek O. & G. Co.'s No. 1 Kloss, NE SW, Sec. 8-4n-8w ..... Partly rigged up and S.D

SCOTT COUNTY

Waldron O. & G. Co.'s No. 1 White, NE cor. SW NW, Sec. 17-3n-29 ..... S.D. 1,860 ft.

SEVIER COUNTY

Tristate Oil Co.'s No. 1 Grimble, Sec. 34-8-22, S½ SW ..... S.D. 950 ft.

ST. FRANCIS COUNTY

E. R. Henderson's No. 1 Britton, Sec. 1-4-1e, 1,000 ft. S and E NW cor. NE NW ..... Drlg. 2,935 ft.

UNION COUNTY

Cox et al's No. 1 Goodwin, 360 ft. S, 180 ft. W, NE cor. SW SW, Sec. 3-16-16 ..... S.D. 140 ft.
H. H. Helms' No. 1 C. H. Murphy, NE cor. NW NE, Sec. 21-16-14 ..... S.D. 2,575 ft.
Wilson & Chapman's No. 1 King, Sec. 3-18-13, 330 ft. N and E, SW cor. NE NE ..... Derrick.
Wilson & Chapman's No. 1-A D. Norman, 330 ft. S and E, NW cor. N½ NE SE, Sec. 3-18-13 ..... S.D. 1,678 ft.

WASHINGTON COUNTY

(Cable tools)

A. B. Chase and Ed Rogers' No. 1 Cunningham, 125 ft. S, 300 ft. W, NE cor. SW NE, Sec. 14-15-32 ..... S.D. 1 750 ft.

East Texas

BOWIE COUNTY

Logan & Elliott's No. 1 Smith, 9,600 ft. S, 2,500 ft. W, NE cor. Chas. Lewis Sur. ..... S.D. 4,505 ft.
Lanford et al's No. 1 W. W. Whybark, 200 ft. S, 200 ft. W, SW cor. J. H. Dyer Sur. ..... Reaming 1,792 ft.

CASS COUNTY

Davis & Pigg's No. 1 Roy Bryan, SW cor. Roy Bryan 88-ac. tr., Albert H. Lattimer Sur. ..... S.D. 2,860 ft.
C. E. Murdock's No. 1 First National Bank, Evans Watson Sur. ..... S.D. 4,390 ft.
John C. Rogers' No. 1 I. E. Lanier, 575 ft. N, 879 ft. W, SE cor. Lanier 86 ac. in K. B. Welborn Sur. ..... S.D. 2,280 ft.
John C. Rogers et al's No. 1 W. Q. Henderson, 3,100 ft. S, 3,100 ft. E, NW cor., Wm. Davis Sur. ..... S.D. 960 ft.

HARRISON COUNTY

M. E. Nash et al's No. 1 Henderson, G. L. Bledsoe Sur. ..... S.D. 85 ft.
Ryan Cons. Pet. Corp.'s No. 1 J. M. Fuhr, 1,300 ft. N of NW cor. T. J. Copelin Sur., 1,675 ft. SW at right angles to NW SE line of O'Neal Sur. ..... Set 12½-in. 181 ft; drlg. 2,585 ft.
Triangle Drlg. Co.'s No. 1 Platt, 1,125 ft. W, 1,995 ft. N, SE cor. F. C. Barker Sur. ..... Location.

MARION COUNTY

Saunoch Dev. Co.'s No. 1 Miller, 725 ft. N, 1,470 ft. E. SW cor. H. Fulgram Sur. (was Gist, Claunch & Dodson) ..... Arranging to resume drlg. 4,182 ft.
Geo. Hindeman et al's No. 1 F. V. Lindsey, 2,500 ft. S, most northerly N line, 2,555 ft. E most easterly W line, Alexander Albright Sur. ..... S.D. 2,380 ft.
Carroll et al's No. 1 Coker, M. Reed Sur. ..... S.D. 1,957 ft.
Starling & Preston's No. 1 Henderson, R. Bennington Sur. H. E. S. ..... Rigging up.

PANOLA COUNTY

Root-Skinner's No. 1 Daniel, 600 ft. N and W lines, Mrs. Gerrell 100-ac. tr., SW cor. Isabel Hanks Sur. .. S.D. for D.S. 740 ft
J. L. Nelson et al's No. 1 J. Williams, 300 ft. S. 700 ft. W, NE cor. Williams' 67-ac. tr. in James Hanks Sur. ..... S.D. 3,055 ft.

SHELBY COUNTY

E. H. Francis' No. 1 John Mims, Mary Smith Sur. ... Drlg. 1,480 ft.
General Minerals Co.'s No. 2 Pickering Lbr. Co., 400 ft. N, 400 ft. E, SW cor. D. S. Height Sur. ..... S.D. 1,400 ft.
Henry Maulding's No. 1 Frost Lbr. Co., NE cor. Frost Lbr. Co.'s 20-ac. tr., A. D. Fountain Sur. ..... Rigged up and S.D.
Prairie Creek Crude Co.'s No. 1 Ellington, 150 ft. N and 200 ft. W from SE cor. 42-a. tr. of J. Burleson Sur.. Reaming 1,750 ft.
Ridgeway et al's No. 1 Polley, Domingues Gonzales Sur., 3,180 ft. E of SW cor., 160 ft. N at right angles of Polley 457-ac. tr. ..... Drlg. 2,605 ft.
Sedberry et al's No. 1 Pickering Lbr. Co., 600 ft. N, 400 ft. E, SW cor. Jane Stoddard Sur. ..... S.D. 2,375 ft.
Western World's No. 1 Foster, Billingsby-Jeremiah Bowlin Sur. ..... S.D. 2,940 ft.
Wray & Dunbar's No. 1 C. A. Hayden, 660 ft. N and W SE cor. 152-ac. tr. in D. T. F. Yordt Sur. ..... S.D. 2,183 ft.

Louisiana-Arkansas Proven Areas

North Louisiana

CADDO PARISH

Company, well, farm name, section and block—	Remarks:
D. C. R. Oil Co.'s No. 1 Caddo School Board, 2,125 ft. S, 1,500 ft. W, NE cor., Sec. 16-19-14	Drlg. 1,520 ft.
Louana Oil & Gas Co.'s No. 1 Cushman, 1,320 ft. N, 660 ft. E, SW cor., Sec. 33-19-16	T.A. 2,800 ft.

CLAIBORNE PARISH

Triangle Drlg. Co.'s No. 1 Brown, 1,542 ft. N, 1,900 ft. W, SE cor. NE, Sec. 1-19-6 ..... Testing 4,460 ft.

MOREHOUSE PARISH

United Gas Public Service Co.'s No. 8 Sandidge, 987 ft. S. 33 ft. E, NW cor., Sec. 26-20-4e ..... Set 9-in. 880 ft.

OUACHITA PARISH

Carbon Con.'s No. 7 Guthrie, Sec. 50-20n-4e, 5,263 ft. N, 7,475 ft. W of cors. of Secs. 35, 26 and 49, in Sec. 50 ..... Location abd.

RICHLAND PARISH

Pelican Nat. Gas Co.'s No. 1 Noe, C W½ NE, Sec. 14-17-5e ..... Set 12-in. 259 ft.

SABINE PARISH—ZWOLLE

Abbott & Rankin's No. 1 Nulton, 330 ft. S and E, NW cor. SE NE, Sec. 2-7-13 ..... Derrick.
Abbott & Rankin's No. 1 Towicy, 330 ft. S and E, NW cor. SE NW, Sec. 1-7-13 ..... Pumping 30 bbls. 2,340 ft.
J. O. Andree's No. 1 Sabine Lbr. Co., 330 ft. S and E. NW cor. SW NW, Sec. 11-7-12 ..... Set 10-in. 40 ft.
J. H. Askew's No. 1-E McNeely, 330 ft. S, 200 ft. W, NE cor. SE NE, Sec. 14-7-11 ..... Set 6-in. 2,367 ft.
J. H. Askew's No. 1 Lyons, 330 ft. W, 252 ft. N, SE cor. SE NE, Sec. 31-8-10 ..... Rigging up.
Cameron Oil Co.'s No. 1 G. Martinez, 345 ft. E, 540 ft. N, SW cor., Sec. 2-7-13 ..... Derrick.
Coates Pet. Co.'s No. 2-B Nulton, 330 ft. N and E, SW cor. SW NE, Sec. 3-7-13 ..... Pumping 125 bbls. 2,396 ft.
Coates Pet. Co.'s No. 4 S. S. Martinez, 97 ft. S, 215 ft. W, NE cor. NE SE, Sec. 2-7-13 ..... Set 10-in. 40 ft.
Continental Drlg. Co.'s No. 1 Leone est., 70 ft. N, 200 ft. W, SE cor., Sec. 31-8-12 ..... Derrick.
Dengail O. & G. Co.'s No. 1-F Nulton, 330 ft. S and E, NW cor. SW NW, Sec. 2-7-13 ..... W.O.S.R. 2,501 ft.
Dengail O. & G. Co.'s No. 2-G Nulton, 330 ft. N and E, SW cor. NE NE, Sec. 3-7-13 ..... S.D; W.O. 2,475 ft.
Edwards & Hubier's No. 1 G. Martinez, 510 ft. S, 250 ft. E, NW cor. SW SW, Sec. 2-7-13 ..... Derrick.
J. E. Grandstaff's No. 1 Johnson, 8½ SW SW, Sec. 5-7-11 Setting liner 2,410 ft.
E. W. Gill's No. 1 Gray, 200 ft. S and W, NE cor. SW SW Sec. 3-7-13 ..... Set 6-in. 2,052 ft.
J. J. Hall's No. 4 Jacoba, 175 ft. W, 300 ft. N, SE cor. Sec. 1-7-11 ..... Drlg. 2,490 ft.
D. D. Holcomb's No. 2 Quayhagiew, 149 ft. N, 200 ft. E SW cor. SE SE, Sec. 11-7-11 ..... Set 6-in. 2,400 ft.
Hutchini et al's No. 1 Garcia, 332 ft. N, 354 ft. W, SE cor. NE SW, Sec. 4-7-13 ..... Dry and abd. 2,465 ft.
Imperial Producers Co.'s No. 1 Leone Est., 1,334 ft. S, 660 ft. E, NW cor., Sec. 32-8-12 ..... Location.
H. M. Jones' No. 1 Raines, 300 ft. S, 150 ft. W, NE cor. NW NW, Sec. 14-7-11 ..... Drlg. 1,950 ft.
E. T. Kilgore's No. 1 Pate, 330 ft. N and W, SE cor. NE NE, Sec. 32-8-11 ..... Drlg. 1,950 ft.
A. D. King, trustee's No. 1 Webb, 300 ft. S and E, NW cor. NW SW, Sec. 31-8-11 ..... Drlg. 2,507 ft.
Lanier et al's No. 2 Steinhorst, 150 ft. S and W, NE cor. SE NW, Sec. 3-7-13 ..... S.D. for wtr. 1,125 ft.
Lion Oil Ref. Co.'s No. 2 LaRoux, 384 ft. S and W, NE cor. SW SE, Sec. 3-7-13 ..... Location.
Loring Oil Co.'s No. 18 Bowman-Hicks, 1,320 ft. S, 275 ft. E, NW cor. SW NW, Sec. 15-7-13 ..... S.D. 5,272 ft.
Lyons & Neely's No. 4 Byrd, NE cor. SW SW, Sec. 1-7-11 Drlg. 1,250 ft.
H. D. McDonald's No. 1 T. L. Andrin, 180 ft. E, 150 ft. N, SW cor. NW SE, Sec. 15-7-11 ..... Derrick.

C. M. HEETER, SONS & CO., INC.
MAIN OFFICE AND WORKS, BUTLER, PA.

"Heeter's" Packers and Swabs

Heeter's Improved Patent Swabs, Corrugated Friction Sockets, Wire Line Pumping Outfits, Sand Pumps and other Gas and Oil Well Materials

Frank Meiat's No. 1 Davis, 175 ft. W, 225 ft. S, NE cor., Sec. 2-7-13 ..... Drlg. 2,461 ft.
Ben Merritt, trustee's No. 1 Chadick, SW cor. SW NE, Sec. 31-8-10 ..... S.D. 38 ft.
C. D. Neff, tr.'s No. 1 Stoker, 212 ft. N and W, SE cor. NE SW, Sec. 10-7-11 ..... Derrick.
Pelican Nat. Gas Co.'s No. 15 Louisiana Long Leaf Lbr. Co., 320 ft. N and W, SE cor. SE SW, Sec. 5-7-11 ... S.D. 2,670 ft.
Pelican Nat. Gas Co.'s No. 16 La. Long Leaf Lbr. Co., 86 ft. S, 544 ft. W, NE cor. NW NE, Sec. 10-7-11.... Derrick.
T. L. Phillips et al's No. 1 Haley, 330 ft. S and E, NW cor. NW SE, Sec. 6-7-12 ..... Derrick.
H. C. Pitts et al's No. 1 Trammell, 1,037 ft. S, 150 ft. E, NW cor. NE NE, Sec. 5-7-11 ..... Location.
Ritchie Prod. Co.'s No. 1 Byrd, 503 ft. N, 399 ft. W, SE cor., NE NW, Sec. 1-7-11 ..... Rigging up.
O. J. Rowe's No. 2 Williams, 170 ft. N, 200 ft. E, SW cor. SW NW, Sec. 13-7-11 ..... Location.
C. T. Ruffian's No. 2 Libby, 330 ft. S and E, NW cor. NE NW, Sec. 8-7-11 ..... Pumping 65 bbls. 2,454 ft.
Sabine Prod. Co.'s No. 3 Pearce, Sec. 10-7-11, 330 ft. S and E, NW cor. SE NW ..... S.D.; W.O. 2,699 ft.
Service Drlg. Co.'s No. 3-A Gardner, 128 ft. S, 134 ft. W. NE cor., Sec. 12-7-11 ..... Pumping 20 bbls. 2,589 ft.
Skidmore Oil Co.'s No. 1 G. Martinez, 396 ft. E, 330 ft. S, NW cor. SE SE, Sec. 3-7-13 ..... Coring 2,030 ft.
Ben F. Smith's No. 2 Turner, 250 ft. N, 450 ft. E, SW cor. NW NW, Sec. 4-7-11 ..... S.D. for wtr. 700 ft.
W. S. Smith, trustee's No. 1 Hamilton, 330 ft. N and E, SW cor. NE NE, Sec. 32-8-11 ..... Derrick.
F. E. Stancil's No. 1 Pouder, 273 ft. S, 397 ft. E. NW cor. NE SE, Sec. 10-7-11 ..... S.D. 2,593 ft.
F. E. Stancil's No. 2 Pouder, 805 ft. N, 283 ft. E. SW cor. SE SE, Sec. 10-7-11 ..... Location.
State Prod. Co.'s No. 1 Keazele, 150 ft. N and W, SE cor. NW SW, Sec. 2-7-13 ..... S.D. 1,600 ft.
State Prod. Co.'s No. 1 Lites, 150 ft. S and W, NE cor. SE SW, Sec. 28-8-11 ..... Location.
State Prod. Co.'s No. 1 Sabine Lbr. Co., 365 ft. N, 100 ft. W SE cor. NW SW Sec. 2-7-13 ..... 2,000 ft. oil in hole 2,427 ft.
H. H. Stout et al's No. 1 Byrd, 150 ft. N and E, SW cor. NW NW, Sec. 1-7-11 ..... Set 10-in. 42 ft.
The Texas Company's No. 2 Maines, 330 ft. N and E. SW cor. SE, Sec. 5-7-11 ..... Drlg. 2,455 ft.
The Texas Co.'s No. 4 Stille, 530 ft. E, 330 ft. N, SW cor., Sec. 32-8-11 ..... Location.
A. A. Trammell's No. 1 Hill, 330 ft. S and W, NE cor. SE SE, Sec. 32-8-11 ..... S.D. 2,515 ft.
W. C. Turnbow's No. 4 Williams, 210 ft. S, 613 ft. E, NW cor. SW NW, Sec. 13-7-11 ..... Rigging up.
C. H. Tuttle's No. 3 Byrd, 700 ft. E, 510 ft. S, NW cor., Sec. 7-7-10 ..... Set 6-in. 2,422 ft.
J. P. White's No. 1 Nulton, 330 ft. N and E, SW cor. NE NW, Sec. 1-7-13 ..... S.D. 2,455 ft.
George Woulf's No. 1 Nulton, 330 ft. S, 330 ft. E, NW cor. SW NE, Sec. 3-7-13 ..... S.D. 2,034 ft.

UNION PARISH

Nemours Corp.'s No. 1 Moore, Sec. 34-20-3e ..... Set 6-in. 2,040 ft.
Southern Carbon Co.'s No. 61 fee, 2,210 ft. N, 660 ft. E, SW cor. SE, Sec. 17-20-4e ..... Trying to kill blowout 870 ft.

Arkansas

UNION COUNTY—URBANA

Marine Oil Co.'s No. 1 Winn est., 330 ft. S and E, NE cor. S½ NW, Sec. 11-18-13 ..... T.A. 3,586 ft.
Marine Oil Co.'s No. 2-E Thompson, 330 ft. N, 330 ft. E, SW cor. NE NE, Sec. 10-18-13 ..... Location.
Wilson & Chapman's No. 1-B Hadley, Sec. 3-18-13, 330 ft. S and W, NE cor. SE NW ..... T.A. 3,545 ft.
Wilson & Chapman's No. 2 Emily King, Sec. 3-18-13, 150 ft. S, 150 ft. E, NW cor. NE NE ..... S.D. 1,730 ft.

East Texas

PANOLA COUNTY

Daisy O. & G. Co.'s No. 1 Rucks, John Palmer Sur. ..... S.D. 3,359 ft.
United Prod. Corp.'s No. 17 Steele, 1,320 ft. N, 660 ft. W, SE cor. C. D. Steele lse., in B. C. Jordan Sur. .... Location.

Mississippi

HINDS COUNTY

Jackson O. & G. Co.'s No. 4 Mayes, 1,400 ft. E, 211 ft. S, NW cor., Sec. 1-5n-1e ..... Drlg. 50 ft.
Meredith-Smith's No. 4 Strowder, 616 ft. S, 2,878 ft. W, NE cor., Sec. 12-5n-1e ..... Set 8-in. 756 ft; set 6⅝-in. 2,356 ft.

Wildcat Operations in Mississippi

AMITE COUNTY

Company, well, farm name, section and block—	Remarks:
Magnolia State O. & G. Co.'s No. 1 Anderson, C NE NW, Sec. 14-3n-3e	Rig on location.

CLARKE COUNTY

F. X. Gowans et al's No. 1 Elfring, SE NE, Sec. 13-1n-14e. S.D. 104 ft.

HINDS COUNTY

Atkins et al's No. 1 Crane Lawrence, Sec. 23-6n-1e, 300 ft. E, 132 ft. N, SW cor. NE SE ..... Arranging to set 4½-in. 2,483 ft. (corrected).
Love & Lancaster's No. 1 Elton Plantation, C SE, Sec. 17-4n-1e ..... Derrick.

LAMAR COUNTY

Stauffer & Kouri's No. 1 Bond, SE NE, Sec. 18-2n-14w.. S.D. 2,613 ft.

LOWNDES COUNTY

Lowndes County Oil & Dev. Co.'s No. 1 Carr est., Sec. 34-17-16e, 1,320 ft. E, 330 ft. S, NW cor. Sec. ..... Arranging to resume drlg. 2,100 ft.

MONROE COUNTY

P. J. McAlpine's No. 1 Rye, Sec. 22-15s-17w ..... S.D. 1,777 ft.

NEWTON COUNTY

Bob Dalton's No. 1 Majure, 400 ft. N, 300 ft. E, SW cor. SE, Sec. 25-4n-11e ..... S.D. 1,530 ft.

NOXUBEE COUNTY

Thompson & Donohue's No. 1 Donohue, Sec. 25-16n-17e.. Repairing derrick; T.D. 1,735 ft.

RANKIN COUNTY

Home Oil Prod. Corp.'s No. 1 So. Jackson Land Co., 85 ft. S, 130 ft. W, NE cor. NW NW, Sec. 23-5n-1e ..... Derrick.
Love Pet. Co.'s No. 2 Int. Lbr. Co., 450 ft. S and E, NW cor., Sec. 28-6n-2e ..... Drlg. 2,491 ft.
Majestic O. & G. Co.'s No. 1 Elton Lbr. Co., Sec. 10-4n-3e. Derrick.

SCOTT COUNTY

M. U. Culley et al's No. 1 Owens, Sec. 2-8-9 ..... S.D. 750 ft.

Wildcat Operations in Alabama

LAMAR COUNTY
(Cable tools)

Company, well, farm name, section and block—	Remarks:
DeSoto O. & G. Corp.'s No. 1 Gardner, NW NW, Sec. 22-15s-16w	Drlg. 3,184 ft.

MOBILE COUNTY

J. C. Prine et al's No. 1 M.&O.R.R., Sec. 33-2n-4w ..... D.S. stuck 700 ft; T.D. 2,612 ft.

WASHINGTON COUNTY

South Alabama O. & G. Co.'s No. 1 Wilson, Sec. 34-7n-1w. Rigging up.

Snapshots Taken While Scouting With The Oil and Gas Journal's Cameras

(1) Left to right—Roy Hunter, repairman; B. O. Fisher, engineer; W. L. Shannon, oiler; R. A. Pickett, repairman; L. S. Shaw, chief engineer; and J. B. Spurrier, chief electrician, of Carter Oil Co. in Seminole, Okla., area. (2) E. A. Starr, traffic manager, Texas Pacific Coal & Oil Co., Thurber, Tex. (3) Keith A. Spitznagel, consulting geologist in charge of sales for Hudnall & Pirtle, Tyler, Tex. (4) Harry Duke, driller for John Mabee, Van, Tex.. (5) Left to right—Ted Green, clerk in production dept., and D. Runyon, field supt., British-American Oil Co., Oklahoma City Field.

MARKET RECORD OF OIL SECURITIES

By A. E. Mockler

NEW YORK, Sept. 5.—The general market showed unsuspected strength during the past week, with the oils participating to the fullest extent in the evident firmness. Of outstanding interest, so far as the oils are concerned, was the increasing volume of activity on the lower price oils on both the curb and the "big board." Until a few weeks ago, 100,000 shares a day was considered a fair day's turnover on the curb, but daily volume went over the 800,000-share mark during the week just ended, the largest day's trading in the past 18 months, with increased activity in the oils contributing to the heavy volume.

Among the more active issues on the Stock Exchange during the week were Amerada, Atlantic Refining, Columbia Gas & Electric, Standard Oil of New Jersey, Standard Oil of California, Louisiana Oil Refining, Phillips Petroleum, Seaboard Oil of Delaware (which appears to be experiencing pool support), Shell Union, Superior Oil, Tide Water Associated, Texas Corp., and Wilcox Oil & Gas. On the curb there was a quickening in activity on International Petroleum, Creole, Humble, Magdalena Syndicate, Lone Star Gas, Gulf Oil, Salt Creek Producers, Darby Petroleum, Colon Oil, and Arkansas Natural Gas.

Texon

Texon Oil & Land Co. has declared an extra dividend of 25 cents per share on the common stock, payable September 30 to stock of record September 12.

South Penn

South Penn Oil Co. has declared the regular quarterly dividend of 25 cents per share, payable September 30 to stock of record September 15.

Penn-Mex

Penn-Mex Fuel Co. has called a special stockholders meeting for 2 p. m. September 12 to vote on a proposed amendment of the certificate of incorporation of the company changing the authorized capital stock to 400,000 shares of $1 par value each, instead of 400,000 shares of $25 par value each and to authorize the directors at their discretion to declare and pay dividends out of any funds of the company which from time to time may be available for that purpose, and also to authorize the directors to credit reserves to cover contingent liabilities and uninvested accounts for the company or to fund such reserves and to abolish any such reserves or funds.

Colonial Beacon

Colonial Beacon Oil Co. shows for the six months ended June 30 net loss of $1,120,806 after interest and depreciation, comparing with net loss of $1,864,020 in the first six months of 1931. For the quarter to the like date net loss was $254,904 after charges, against net loss of $865,902 in the preceding quarter, and net loss of $859,009 in the June quarter last year.

Memphis Natural Gas

Memphis Natural Gas Co. has declared the regular quarterly dividend of $1.75 per share on the preferred, payable October 1 to stock of record September 20.

National Refining

National Refining Co. has declared a quarterly dividend of $2 per share on the preferred stock, payable October 1 to stock of record September 15.

Standard of Kentucky

Standard Oil Co. of Kentucky has declared a quarterly dividend of 30 cents per share on the common, payable September 30 to stock of record September 15.

Wiser Oil

Wiser Oil Co. has declared a quarterly dividend of 25 cents per share on its $25 par common, payable October 1 to stock of record September 10.

Union Tank Car

Union Tank Car Co. reports for the first six months of 1932 net earnings of $524,647 after interest, depreciation, Federal taxes, etc., equal to 41 cents a share on 1,254,048 no-par shares of common. This compares with net of $984,705, or 78 cents a share, in the first half of 1931.

Twenty Representative Stocks

The Oil and Gas Journal's weekly average price of 20 representative petroleum stocks listed on the New York Stock Exchange and New York Curb based on closing quotations for Wednesday, was as follows:

Feb. 10	12.02	May 25	12.44
Feb. 17	13.28	June 1	11.34
Feb. 24	13.45	June 8	11.39
Mar. 2	13.61	June 15	11.86
Mar. 9	14.38	June 22	11.41
Mar. 16	13.00	June 29	12.09
Mar. 23	13.02	July 6	11.75
Mar. 30	13.85	July 13	12.19
Apr. 6	12.12	July 20	12.47
Apr. 13	11.31	July 27	14.50
Apr. 20	12.11	Aug. 3	15.18
Apr. 27	12.46	Aug. 10	17.21
May 4	11.73	Aug. 17	16.21
May 11	13.23	Aug. 24	17.19
May 18	12.57	Aug. 31	17.24

Bandini Petroleum

Bandini Petroleum Co. has declared a monthly dividend of 5 cents per share payable September 20 to stock of record August 31.

Tide Water Transport

Tide Water Associated Transport Corp. has called for redemption $55,000 principal amount of its first lien 10-year marine equipment 5 per cent sinking fund gold bonds, due on September 1, 1937.

Independent Oils on New York Curb

Quotations Compiled by Francis, Bro. & Co., Associate Members of New York Curb, Kennedy Building, Tulsa, Okla.

(Complete record week ending Aug. 27)

1932 High	1932 Low	Week ended Aug. 27 Sales	Week ended Aug. 27 High	Week ended Aug. 27 Low	Close Aug. 31	Stocks—		Outstanding capital	Par value	Div. rate	Payable or last paid	1929 High	1929 Low	1930 High	1930 Low	1931 High	1931 Low
¾	¼	5,600	1/16	¾	1/16	American Maracaibo	(sh)	700,000	N.P.	....	.....	8⅝	1⅛	4½	½	1¾	¼
3¾	¾	1,500	3½	2⅛	3⅜	Arkansas Natural Gas	(sh)	4,084,225	N.P.	....	.....	26	3¾	16¾	4⅝	6½	1⅛
2⅝	½	10,500	2½	2	2¼	Arkansas Natural Gas "A"	(sh)	3,522,521	N.P.	....	.....	24¾	6½	16⅝	4⅝	6¾	1⅛
5½	1½	900	5	4	5	Arkansas Natural Gas pfd.	(sh)	2,193,000	$10	....	4- 1-32	9	4	8⅛	6¼	7	3⅞
9¾	7	No sales	..	..	9½	British American Oil Corp.	(sh)	2,622,642	N.P.	20cQ	9-14-32	62	7⅞	23	13⅜	16⅜	6¼
¾	⅛	800	⅝	½	½	Carib Syndicate		$131,250	25c	....	.....	4⅞	1	2¾	⅝	2⅜	⅛
6⅞	1¼	85,600	5½	5	5	Cities Service	(sh)	36,418,721	N.P.	....	6- 1-32	68⅛	20	44¼	13	20¾	5
53⅜	10	2,600	31	26	32	Cities Service pfd.	(sh)	1,125,931	N.P.	....	6- 1-31	98¾	84	93⅞	78¼	84⅜	35⅜
⅛	1/16	5,100	⅛	1/16	1/16	Colombia Syndicate		3,250,000	N.P.	....	.....	..	..	21	3⅜	7⅛	1
1⅞	½	2,900	1¾	1⅝	1½	Columbia Oil & Gasoline v.t.c.	(sh)	$2,000,000	$1	....	.....	2	½	¾	⅛	½	1/16
1¼	¼	3,600	1¼	1	1⅛	Colon Oil	(sh)	2,200,000	N.P.	....	.....	15	3⅞	8¼	1⅛	3⅛	¼
2	1	1,100	2	1½	..	Consolidated Royalty Oil Co.		$5,527,880	$10	5cQ	7-25-32	11⅛	2½	5⅞	2	2¾	1
2¼	¼	2,100	2¼	1⅝	..	Cosden Oil	(sh)	323,950	N.P.	....	.....	135	42	74¾	1¼	3¾	⅜
7	1⅝	1,800	7	5	6½	Darby Petroleum	(sh)	609,696	N.P.	....	10-15-30	26	6½	21⅜	4¼	5	1⅜
3	1	1,300	3	2⅛	..	Derby Oil & Refining	(sh)	500,000	N.P.	....	.....	11	2	11	2	6	1½
24½	10½	No sales	..	..	..	Derby Oil & Refining pfd.		48,500	N.P.	....	.....	44	20¾	60	30	40½	25
41	23	12,900	40½	37¼	40	Gulf Oil Corp.	(sh)	4,504,921	$25	....	10- 1-31	209	115	166⅞	58½	75½	25⅝
4½	2½	300	4¼	4	4⅛	Indian Terr. Illum. Oil "B"	(sh)	7,090,037	N.P.	....	.....	..	..	53½	12⅝	16⅞	5
¼	1/16	5,200	1/16	⅛	⅛	Intercontinental Petroleum		$5,682,000	$5	....	.....	2⅞	⅜	1⅝	⅜	⅝	⅛
1	⅜	100	⅛	⅞	..	Kirby Petroleum	(sh)	750,000	N.P.	....	.....	3⅝	1¼	3	⅞	1⅞	¼
⅜	⅛	No sales	..	..	½	Leonard Oil & Development		$50,000,000	$25	....	.....	14⅞	2½	5	¾	2	½
1¼	½	2,600	¾	⅝	1¼	La. Land & Exp.	(sh)	3,000,000	N.P.	....	.....	6⅛	1	4¾	½	1½	¼
3½	⅞	100	3½	3½	..	Lion Oil & Refining	(sh)	250,000	N.P.	....	10-27-30	38⅞	18	29	4⅞	6¾	1½
9⅞	3⅜	3,400	8½	7⅝	9¼	Lone Star Gas	(sh)	5,000,000	N.P.	16cQ‡	6-30-32	67⅞	28	55⅞	19⅝	25	5½
⅛	1/16	19,000	⅛	1/16	⅛	Magdalena Syndicate	(sh)	850,000	$1	....	.....	1¾	⅛	½	⅛	½	⅛
7	3¾	100	7	7	7⅝	Margay Oil Corp.		160,000	N.P.	25cQ	7-11-32	38½	14	16	3	5	1⅞
5¼	1⅝	400	4	3½	4	Memphis Natural Gas	(sh)	920,000	N.P.	....	4-15-32	24	8⅛	22¼	7½	12⅛	4½
3	1½	No sales	..	..	..	Mexico-Ohio Oil Co.		500,000	N.P.	....	.....	6⅜	2¼	7½	1¾	4⅞	1½
⅛	⅛	No sales	..	..	..	Mountain & Gulf		$4,000,000	$1	....	4-15-31	1½	½	⅝	⅜	½	⅛
4½	2½	1,900	4½	4⅛	4¼	Mountain Producers		$1,682,182	$10	20cQ	7- 1-32	22½	7	12½	3¾	5⅞	2
14⅛	8	1,700	14⅛	13½	..	National Fuel Gas	(sh)	3,810,183	N.P.	25cQ	7-15-32	43⅞	23	41⅜	19⅜	26½	9¾
⅞	⅜	300	⅞	⅝	..	New Bradford Oil		$7,224,186	$5	....	4-15-31	5	2½	3½	1⅛	1½	½
1	⅜	No sales	..	..	..	New Mexico and Arizona		$1,000,000	$1	....	.....	9⅜	2¼	7¼	1½	3	¾
1½	⅝	1,100	1½	1	..	North Central Texas	(sh)	262,446	$5	....	9- 2-30	18½	6⅛	11¼	2½	3¼	⅝
⅜	1/16	1,800	⅜	¼	1/16	North European Oil	(sh)	1,372,391	N.P.	....	.....	..	..	6¼	⅝	2⅛	¼
6¼	3	1,700	5⅛	5	..	Pacific Western Oil	(sh)	1,000,000	N.P.	....	.....	26⅝	12⅛	19½	5½	15	2⅛
⅛	1/16	No sales	..	..	..	Pandem	(sh)	1,291,463	N.P.	....	.....	3½	½	2½	⅛	½	1/16
⅝	1/16	500	½	⅜	..	Pantapec Oil	(sh)	1,595,500	N.P.	....	.....	10½	1⅞	4⅜	⅞	2	⅜
10⅞	6	1,100	9⅞	9½	9¾	Plymouth Oil	(sh)	1,050,000	$5	25cQ	7- 1-32	37	22	27½	16¼	19	6
½	1/16	400	½	½	..	Reiter-Foster	(sh)	388,584	N.P.	....	12- 2-29	8½	1⅛	5⅜	1	3⅛	¼
1	¼	No sales	..	..	..	Richfield Oil pfd. x.w.	(sh)	399,950	$25	....	.....	31½	22	23½	6½	11	¼
1⅝	⅝	No sales	..	..	..	Ryan Consolidated	(sh)	296,931	N.P.	....	.....	11	2	8⅝	2	3	⅝
⅞	⅛	700	⅞	⅝	..	Salt Creek Consolidated	(sh)	1,286,300	$10	....	4- 1-31	5⅞	1⅞	2½	½	1⅜	⅛
5⅜	2⅞	2,000	5⅜	4⅞	5⅛	Salt Creek Producers	(sh)	1,496,859	$10	25c	8- 1-32	25⅞	9	15¼	5¼	7¾	2⅜
⅝	¼	900	½	⅜	½	Sunray Oil	(sh)	1,163,185	$5	....	4-15-31	12	5⅝	10	2	5¼	⅛
8¾	4½	1,400	7⅝	7¼	8¾	Texon Oil & Land	(sh)	936,036	N.P.	25c†	9-30-32	23	7⅛	19½	8	12⅞	2½
½	⅛	No sales	..	..	½	Venezuelan Petroleum	(sh)	755,090	$5	....	2-15-30	6½	1¾	4½	⅜	1⅞	¼
2	1⅛	No sales	..	..	..	Woodley Petroleum		$500,000	$1	....	3-31-29	9½	2	5	½	3½	1⅛
⅝	⅛	400	½	⅜	..	Y Oil & Gas		100,000	N.P.	....	.....	2⅞	½	2½	⅜	2¼	¼

*Ex-dividend. †Plus extra dividend of 25 cents. ‡Payable in stock. §Paid in lieu of regular cash dividend of 2 per cent.

The bonds were called at prices not to exceed 102 and accrued interest.

Rio Grande

Rio Grande Oil Corp. reports for the six months ended June 30 net loss of $9,275 after taxes and charges, compared with net loss of $1,997,892 in the first half of 1931. For the June quarter net loss was $93,045 after taxes and charges, against net profit of $83,770 in the previous quarter and net loss of $2,058,583 in the June quarter of 1931.

Lone Star

Lone Star Gas Co. has declared the regular quarterly dividend of $1.62½ per share on the 6½ per cent preferred, payable August 1 to stock of record July 20.

British American

British American Oil Co., Ltd., has declared the regular quarterly dividend of 20 cents per share (payable in Canadian funds), payable October 1 to stock of record September 14.

Union Tank Car

Union Tank Car Co. has declared the regular quarterly dividend of 35 cents a share, payable September 1 to stock of record August 15.

Standard Oil Stocks on New York Curb

Quotations Compiled by Francis, Bro. & Co., Associate Members of New York Curb, Kennedy Building, Tulsa, Okla.

(Complete record week ending Aug. 27)

1932 High	1932 Low	Week ended Aug. 27 Sales	Week ended Aug. 27 High	Week ended Aug. 27 Low	Close Aug. 31	Stocks—		Outstanding capital	Par value	Div. rate	Payable or last paid	1929 High	1929 Low	1930 High	1930 Low	1931 High	1931 Low
7	6	No sales ..	..	..	..	Borne Scrymser		$1,000,000	$25	....	10-15-30	46½	25	25	11¼	16	6
35	17½	400	24	24	..	Buckeye Pipe Line		$10,000,000	$50	75cQ	9-15-32	74½	55	69	39⅞	56	30
90	53	100	89½	89½	..	Chesebrough Mfg.		$3,000,000	$25	$1Q‡	9-30-32	210	130	184⅞	104¼	129½	75
3¼	1¾	2,300	3⅛	2⅞	2⅞	Creole Petroleum	(sh)	5,977,872	N.P.	....	.....	11¾	5⅜	7⅞	3	3⅞	1⅜
35	18	350	30	27	28¾	Eureka Pipe Line		$5,000,000	$100	$1Q	8- 1-32	70½	40	54¾	26	36	19
53½	35⅝	4,100	53½	48	..	Humble Oil & Refining		$74,103,300	$25	50cQ	10- 1-32	128	74⅛	119	57¼	72	44⅛
10	6¼	3,100	9¾	9	9½	Imperial Oil of Canada	(sh)	26,557,496	N.P.	12½cQ	9- 1-32	41	22	30	15	18¼	7⅝
7½	2¾	100	4¾	4¾	..	Indiana Pipe Line		$3,000,000	$10	10cQ	5-14-32	41⅞	26	41	14½	21⅛	5½
11⅜	8	13,100	11¼	10½	11¼	International Petroleum	(sh)	14,247,088	N.P.	25cQ	9-15-32	30⅜	15	24	11⅜	15½	7⅜
10½	6	400	8⅝	8¼	..	National Transit		$6,362,500	$12.50	20cQ	9-15-32	25⅛	10⅛	22⅜	11½	17½	5
5½	2¼	1,100	5⅛	4½	..	New York Transit		$500,000	$5	10cQ	4-15-32	17½	10	21⅜	10⅛	14½	5⅛
4⅜	3⅛	No sales ..	..	..	..	Northern Pipe Line		$1,200,000	$10	25c	7- 1-32	63	41	54	26¼	35½	20
9	4	500	7½	6½	..	Penn Mex Fuel		$10,000,000	$25	50c	5-25-32	44½	20	32	12	15½	5½
16½	9⅝	600	15½	14½	15	South Penn Oil		$30,000,000	$25	25cQ	6-30-32	60¼	35⅛	45⅞	16⅛	23⅞	9¼
10	5	No sales ..	..	..	..	Southern Pipe Line		$1,000,000	$10	15cQ	9- 1-32	22½	13	20⅞	8⅜	17	7
37	27	No sales ..	..	..	..	Southwest Pennsylvania Pipe Line		$1,750,000	$50	$1Q	10- 1-32	70	60	64	32	42½	25
25	13⅛	25,000	25	23⅞	24	Standard Oil of Indiana		$424,914,895	$25	25cQ	9-15-32	63	45	59⅞	30	38½	13½
15⅞	8⅝	700	14⅛	12½	13½	Standard Oil of Kentucky		$25,654,516	$10	30cQ	9-30-32	46⅞	29	40½	18⅝	23⅝	12⅛
19	10¼	100	16	16	..	Standard Oil of Nebraska		$4,770,550	$25	25cQ	9-20-32	50¼	40	48⅞	34⅝	36½	16
30¼	15½	200	25¾	25	26	Standard Oil of Ohio		$18,811,675	$25	37½cQ	10- 1-32	129	60	108½	43¼	62½	23
2	1⅝	100	2	2	..	Swan-Finch Co.	(sh)	34,480	$25	....	1-15-29	18	10	10	4	4½	1

*Ex-dividend. †Unit of trading less than 100 shares. ‡Plus 50 cents extra.

Transactions in Oil Shares on New York Stock Exchange

Quotations Compiled by Francis, Bro. & Co., Members of the New York Stock Exchange and Associate Members of New York Curb, Kennedy Building, Tulsa, Okla.

(Complete record week ending Aug. 27)

1932 High	1932 Low	Week ended Aug. 27 Sales	Week ended Aug. 27 High	Week ended Aug. 27 Low	Close Aug. 31	Stocks—		Outstanding capital	Par value	Div. rate	Payable or last paid	1929 High	1929 Low	1930 High	1930 Low	1931 High	1931 Low
20½	12	3,600	20½	19	20	Amerada Corp.	(sh)	844,200	N.P.	50cQ	1-30-32	42⅝	17½	31½	16½	23	11¼
4	¼	No sales ..	..	..	..	American Republics Corp.	(sh)	209,180	N.P.	....	12-31-30	64¾	12½	37	5⅛	12⅝	1¼
16½	6½	30	15	14⅞	14	Associated Oil		$44,356,180	$15	25cQ	7-15-32	47¼	34½	51	30	31	8⅝
20	8⅝	93,000	20	17½	18½	Atlantic Refining		$67,416,050	$25	25cQ	9-15-32	77⅞	30	51⅝	16⅝	23⅝	8⅝
6¾	3⅜	26,700	6½	5¾	6⅛	Barnsdall Corp. A		$11,293,895	$5	....	5-11-31	49⅛	20	34	8⅝	14½	4
19¾	4¼	240,200	18¾	14¼	18½	Columbia Gas & El.	(sh)	11,684,220	N.P.	25cQ	8-15-32	140	52	87	30⅝	45⅝	11⅝
12	9	No sales ..	..	..	..	Colonial Beacon Oil	(sh)	1,444,970	N.P.	....	12-22-22	32⅞	12½	20⅜	8¾	10½	7½
9	4	78,100	8¾	7⅞	8⅜	Consolidated Oil Corp.	(sh)	14,218,835	N.P.	....	.....	..	..	..	..	..	..
8¼	3⅝	69,200	8¼	6⅞	8½	Continental Oil of Delaware	(sh)	4,738,594	N.P.	....	12-15-27	47⅞	18	30½	7¾	12	5
35¾	9½	46,700	19	16½	18½	General American Tank Car	(sh)	751,638	N.P.	25cQ	7- 1-32	123¾	75	111⅞	53⅛	73⅛	28
15½	4¾	20,600	12	9⅞	11⅜	General Asphalt	(sh)	413,333	N.P.	....	6-15-32	94¾	42¼	71½	22⅜	47	9⅝
24⅞	8¾	33,500	24⅞	19½	23⅛	Houston Oil		$24,968,600	$100	....	10-17-30	109	26	116⅞	29¼	68½	15⅜
2	1	1,300	2	1⅜	..	Indian Refining		$12,564,070	$10	....	10- 1-30	53	13⅛	17	2	4⅝	1⅛
2¼	½	5,100	2	1¼	1¾	Louisiana Oil Refining	(sh)	1,309,069	N.P.	....	.....	18	7	12	3½	4½	1
1½	⅜	1,000	1½	1⅛	1¼	Maracaibo Oil	(sh)	330,000	N.P.	....	.....	18½	5⅛	10⅜	1⅜	3¾	½
7⅞	3¾	12,400	7¾	7	7¼	Mid-Continent Petroleum	(sh)	1,857,912	N.P.	....	2-16-31	39⅞	22⅛	32	11	16⅜	5
12	3½	2,300	12	8¾	12½	National Supply of Delaware	(sh)	390,879	$50	....	5-15-31	144	98½	124¾	60	70¼	5
11	5	36,100	10⅞	9⅛	10	Ohio Oil	(sh)	6,648,052	N.P.	20cQ	9-15-32	79⅞	64¼	32	16	19½	5⅛
12½	6	200	12½	12	..	Pan American P. & T.	(sh)	1,000,000	$5	20cQ	9-15-32	69	40½	46½	42	35⅛	20
13½	7¼	500	13½	12½	12	Pan American P. & T. "B"	(sh)	2,474,288	$5	20cQ	9-15-32	69¼	40½	67¼	30	36½	18
1¼	½	700	1¼	1⅛	..	Panhandle P. & R.	(sh)	199,370	N.P.	....	.....	15¼	3	12¾	1¾	4¼	⅝
7⅞	2	33,200	7¾	6¾	7⅜	Phillips Petroleum	(sh)	4,156,908	N.P.	....	1- 2-31	47	24¼	44⅝	11½	16⅝	4
½	¼	4,500	½	⅜	½	Pierce Oil Corp.		$29,622,831	$25	....	.....	3⅜	1	2½	½	1½	⅛
1⅜	½	5,100	1¼	1	..	Pierce Petroleum	(sh)	2,500,000	N.P.	....	2-16-31	5⅞	½	7⅛	1⅛	3⅜	⅛
9	3½	900	9	8½	..	Prairie Oil & Gas		$61,035,800	$25	....	3-31-31	65⅝	40½	54	11¼	20⅜	4⅛
12⅛	5½	900	12	11½	..	Prairie Pipe Line		$101,250,000	$25	....	6-30-31	65	45	60	16⅝	28½	5⅞
1⅝	⅛	500	¾	⅝	⅞	Producers & Refiners		$37,438,950	$50	....	9-15-23	25⅞	4	11⅞	1	6	1
9¾	1	No sales ..	..	..	..	Producers & Refiners pfd.		$2,845,350	$50	....	5- 4-25	46¾	25½	40	11½	16	3
6½	2⅞	22,200	6½	5¼	6	Pure Oil		$75,959,250	$25	....	9- 1-30	30¾	20	27¼	7⅝	11⅞	3¼
1⅜	¼	19,700	1	⅝	1	Richfield Oil (new)		$52,410,875	N.P.	....	.....	49⅝	20	9¾	4⅛	6⅝	⅝
3½	1¾	8,600	3⅜	2⅞	3⅛	Rio Grande Oil	(sh)	1,236,270	N.P.	....	7-25-30	42½	15	25¾	5	10¼	1¼
23	12⅛	4,600	21⅝	20⅜	21½	Royal Dutch N. Y.	(sh)	611,303	....	80½c†	8- 5-32	64	43⅛	56½	36⅞	42⅝	13
16½	6⅝	90,300	16½	14⅛	14⅝	Seaboard Oil of Delaware	(sh)	1,244,383	$4	10cQ	6-15-32	59⅜	8¼	37	9¾	20¾	5½
15⅜	8	410	15	15	..	Shell Transport & Trading Co.		£23,985,000	£1	53c†	7-22-32	51½	40⅝	48⅜	26	34	5
7⅛	2½	37,800	7	6⅛	6⅜	Shell Union Oil	(sh)	13,066,497	N.P.	....	6-30-30	31⅜	19	25½	5¼	10¼	2½
50⅜	18	2,800	48¼	47	48¾	Shell Union Oil pfd.	(sh)	400,000	$100	....	7- 1-31	108¼	93	106¼	55	78	15
7½	3¼	7,100	7½	6¾	..	Simms Petroleum	(sh)	600,000	$20	....	9-15-30	40¼	15	37	5⅝	11	3½
5	2½	2,300	5	4½	5	Skelly Oil		$27,441,250	$25	....	12-15-30	40½	28	12	10⅛	12⅞	2
32	12	1,300	30¾	29½	32	Skelly Oil pfd.	(sh)	119,800	$100	....	5- 1-31	..	..	99¾	42	62	10
11⅞	5¼	55,800	11⅞	10⅝	11⅜	Socony-Vacuum		$793,613,588	$25	20cQ	9-15-32	..	..	106⅜	98	106	87⅛
95½	81	1,200	95½	92¾	..	Standard Oil Export pfd.	(sh)	764,885	$100	$2.50SA.	6-30-32	..	..	..	..	21	8⅝
30¼	15⅛	53,400	30¼	26⅜	29	Standard Oil of California	(sh)	13,102,900	N.P.	50cQ	9-15-32	81⅞	51½	75	42½	51⅜	23⅛
16½	7	11,300	16½	14	12½	Standard Oil of Kansas		$8,000,000	$25	....	3-16-31	33¾	18	49	14⅜	19	7⅜
36¾	19⅞	107,500	36¾	33⅝	34¾	Standard Oil of New Jersey		$637,961,700	$25	25cQ‡	9-15-32	83	49	84⅞	32½	52½	26
33¼	24¾	400	33¼	32	..	Sun Oil	(sh)	1,416,869	N.P.	25cQ	9-15-32	68⅜	55	70	39	45¼	26¾
1½	¼	10,300	1½	1⅛	1½	Superior Oil Corp.	(sh)	766,979	N.P.	....	12-20-30	24	5¼	9⅜	¾	1⅜	¼
17⅜	9¼	53,100	17¼	15½	16½	The Texas Corporation		$246,204,900	$25	25cQ	7- 1-32	71⅞	50	60½	28¼	36¼	9⅞
4	1½	3,300	3⅜	2⅞	3	Texas Pacific Coal & Oil Co.		$9,304,890	$10	....	12-31-29	23⅞	9½	14½	4	6½	1⅞
10	5	300	10	10	..	Tide Water Oil	(sh)	2,191,823	N.P.	25cQ	6-30-32	40	14	31	13	18	9⅞
58½	30	300	57	55	..	Tide Water Oil pfd.	(sh)	199,446	N.P.	$1.25Q	8-15-32	97½	85⅛	94⅞	71	83	30
5¼	2	28,400	5¼	4⅝	4⅞	Tide Water Associated	(sh)	5,560,424	N.P.	....	2-16-31	23½	10	17¾	5⅝	9	2⅛
56	20	1,600	55¼	50	56	Tide Water Associated pfd.		$73,284,500	....	$1.50Q	7- 1-32	90⅞	74⅛	89¾	55	68	20½
14⅝	8	12,800	14½	12⅜	14⅛	Union Oil of California		$108,651,750	$25	25cQ	8-10-32	57	42⅛	50	10⅛	26⅝	11
19¼	11¾	500	16	13½	..	Union Tank Car	(sh)	1,254,048	N.P.	35cQ	9- 1-32	163¾	121⅞	38½	23	25⅛	16
2¼	½	2,000	2	1½	2¼	Warner-Quinlan	(sh)	632,948	N.P.	....	7- 1-30	42⅞	15	27	4¼	7⅜	⅞
8¼	2¾	16,400	6⅞	4¾	5⅛	Wilcox Oil & Gas	(sh)	428,967	$5	...	5-10-28	29¾	12⅞	21	6½	9⅝	2⅞

*Ex-dividend. †Interim dividend for 1931. ‡Plus extra dividend of 25 cents.

In comparing highs and lows for the several years in the three tables, it will be necessary to take into consideration cases where there have been stock split-ups.

TECHNICAL QUESTIONS ANSWERED

By Charles K. Francis, Ph. D., Technical Editor

This department of The Oil and Gas Journal is devoted to the manufacturing branches of the oil industry.

Those connected with the refining of crude petroleum, the manufacture of natural gasoline and closely allied industries are invited to submit their problems to Dr. C. K. Francis, technical editor. The department was created for the purpose of aiding managers, superintendents, engineers, chemists and all those engaged in the various phases of plant operation; also those connected with marketing and utilization of petroleum products.

Questions should be submitted in as much detail as possible so as to assure a satisfactory answer.

All inquiries should be signed and if other than the given initials are to be used please indicate the desired letters.

Questions involving patented processes, intricate formulas, and calculations and estimates of costs, for obvious reasons, cannot be answered. The replies will appear on this page within a reasonable time.

Petroleum Coke Oven

I will be obliged if you will give me some data about the Knowles ovens for petroleum coke. How the feeding pipes introducing the charging stock into the ovens are arranged and managed? What is the floor of the oven? Temperature of the oven at the beginning? Coke temperature at the discharge? Suitable charging stock analysis? Light products obtained and the petroleum coke output?—W. G.

The Knowles coking process for the manufacture of petroleum coke was described by W. T. Ziegenhain in The Oil and Gas Journal, September 10, 1931, page 16. Since this issue is no longer available an outline of the process, based on this article, is given.

The plant described consists of a pipe still for preheating the charge, a battery of six refractory lined ovens where the oil is reduced to coke, a fractionating column for the separation of gasoline distillate and heavy gas oil, quenching and coke handling equipment. The accumulation of coke on the tiled floor of the oven seals any unfilled cracks and this along with the slight vacuum maintained during operation makes it impossible for any appreciable quantity of oil to escape through to the furnace below.

The charge, which may be a mixture of cracked tar, 6.5 gravity, and heavy fuel oil, 11.5 gravity, is held in a tank at 230° to 600° F. This hot oil is pumped to the pipe still to heat it to 800°. About 1,500 bbls. of this stock is processed daily, being fed to the ovens through 1-inch pipes and distributed into each oven through two three-quarter inch lines set in the top of the oven. The type of valve used is not mentioned.

The process is continuous, each oven operating on an eight-hour cycle 1 hour and 20 minutes apart. The charge is introduced when the temperature of the floor is near 2,400° F., the oil vaporizes quickly, the temperature of the vapors approximate 1,300° F. As the coke is built up on the floor of the oven, the temperature falls until the coke reaches the maximum thickness of 6 to 8 inches at the end of five hours, then the oven temperature is about 810° F. At this point the feed is cut off and the drying period of two hours starts. The temperature begins to rise when the oil is shut off, reaching about 1,100° F. At this point a 10-inch flap valve of the vapor riser is opened and a second valve on this riser is closed to prevent the escape of vapors from the other ovens. A jet of live steam opening into the riser pulls out any vapors remaining in the oven and if the escaping steam is badly discolored with oil vapors, the oven is put back on stream, but usually the color is soon lost, indicating that the oven may be opened. The coke ignites when the doors are opened. The coke is pushed out of the oven in 40 minutes by means of a ram into the quenching car; this is run to the quenching station where a quick-opening valve pours a heavy spray of water over the coke. The quality of the coke is indicated in the analysis:

Knowles Petroleum Coke

Specific gravity	1.3
	Pct.
Moisture	0.6
Fixed carbon	94.8
Volatile matter	2.8
Ash	1.8

As the vapors rise from the ovens through a common header, cold gas oil is introduced, the temperature being reduced to about 500° F. The vapors go to a fractionator, from which gasoline distillate is taken off overhead and gas oil from the bottom.

Gasoline Distillate

Gravity, A.P.I.	47.6
Initial	160° F.
Per cent	
10	226
20	255
50	326
90	444
Endpoint	490
Gum, copper dish	300/350 mgm.

The yields from this process are:

Yields

	Per cent weight
Gasoline	7.93
Gas oil	55.02
Gas	19.63
Coke	16.72
Loss	.70

The gasoline made from the process, that recovered from the gas, and also made from the gas oil has an exceptionally high octane number.

Octane Number of Blends

Can you give us information in connection with blending relative to resultant octane rating? We have blended naphtha and natural gasoline in proportions recommended, but have suffered the loss of knockless qualities.—C. E. Y.

The octane rating of a blend of natural gasoline and naphtha is directly proportional to the value of the blending liquids. Natural gasoline frequently has a high rating as compared with the ordinary naphtha, so a blend of the two has a low octane number. When it is desired to increase this rating it is necessary to add some antiknock material such as benzol or tetraethyl lead.

The present knock rating for the standard premium gasoline is 78 octane number. It is the common practice at this time to market three grades of motor fuel: A premium grade, the regular grade and a third grade. A recent survey indicated that the knock rating of the premium grade ranged from 72 to 80 octane number; the regular grade ranged from 52 to 62, and the third grade from 50 to 56.

Tetralin and Other Solvents

Do you know of any solvent for removing iron sulphide from the gasoline side of condensers which would not injure the iron tubes? How is this ordinarily done other than by mechanical means?—E. H. C.

Scouring powders and solutions of caustic soda, used at or near the boiling point, are used for cleaning condensers and pipe. These solutions should be concentrated and circulated through the unit during a shut down period or when the condenser is cut out.

Tetrahydronaphthalene, known as tetralin, is a liquid, specific gravity 0.9725 and boiling point 404° F., is reported to combine with the rust in pipes, penetrating the scale and so softens it that it is eventually carried away. It absorbs substances of an aromatic character and is a solvent for gummy and resinous materials but does not dissolve asphaltic deposits. After tetralin has cleaned a pipe the surface becomes coated with a thin film of tetralin which acts as a protective coating. These observations have been derived from the gas industry, where tetralin is used for the purpose of removing naphthalene from the manufactured gas and keeping the lines clear. It is thought that this substance may be used to advantage in cleaning condenser tubes, exchangers, etc.

Gasoline Loss in Storage and Loading

What methods are there for calculating evaporation losses on crude oil and gasoline in standing tanks and in loading tank cars through the dome and the outlet chamber valve?—J. G.

The extent of the loss that may take place during the handling and storage of crude oil and gasoline depends on several variables, the most important including the volatility of the material, wind and temperature, and facilities for collecting the vapors. There are no reliable methods for calculating the loss.

Experiments to determine losses of crude oil stored under varying conditions, also the losses for certain grades of gasoline due to loading and storage conditions, have been made by the United States Bureau of Mines. The conclusions resulting from these investigations are to be found in several circulars and bulletins of the bureau.

The average breathing loss, from steel tanks, from light oil stored in the Mid-Continent has been estimated at 0.01 per cent per day on the basis of a temperature range of 30° F. per day. According to the Bureau of Mines R.I. 2,531, 1923, by Ludwig Schmidt, tanks painted black and filled two-thirds with naphtha lost 9 per cent during a two-hour sun test, as compared with a 4 per cent loss in tanks that were painted white. A similar test with crude oil indicated an annual loss of 1.24 per cent from a 55,000-bbl. steel tank painted black; a tank painted red lost 1.14 per cent; one painted gray 0.99 per cent, and an aluminum painted tank lost 0.83 per cent per year.

Pumping into a tank or when loading cars during the evening in place of the hot hours of the day reduces the losses about 50 per cent. Losses from gasoline bulk storage tanks are reported in Bureau of Mines R.I. 3,138, by Schmidt and Wilhelm. They state: "Although the evaporation losses range from 1.4 per cent in the housed tank to 3.54 in the red painted tank, the losses would have been greater had the tanks been in actual service during the same period, instead of in standing storage." Insulation and floating roofs are additional loss preventers.

The lighter the gasoline the greater the loss during loading. Natural gasoline may lose from 1 to 5 per cent. The loading loss for motor gasoline may run from 0.25 to 0.50 per cent. When the vapors are collected through a gas recovery system the loss is practically nil. The cars should have stationary dome covers with the necessary venting and filling connections and not filled through an open dome.

Aniline Point of Naphtha

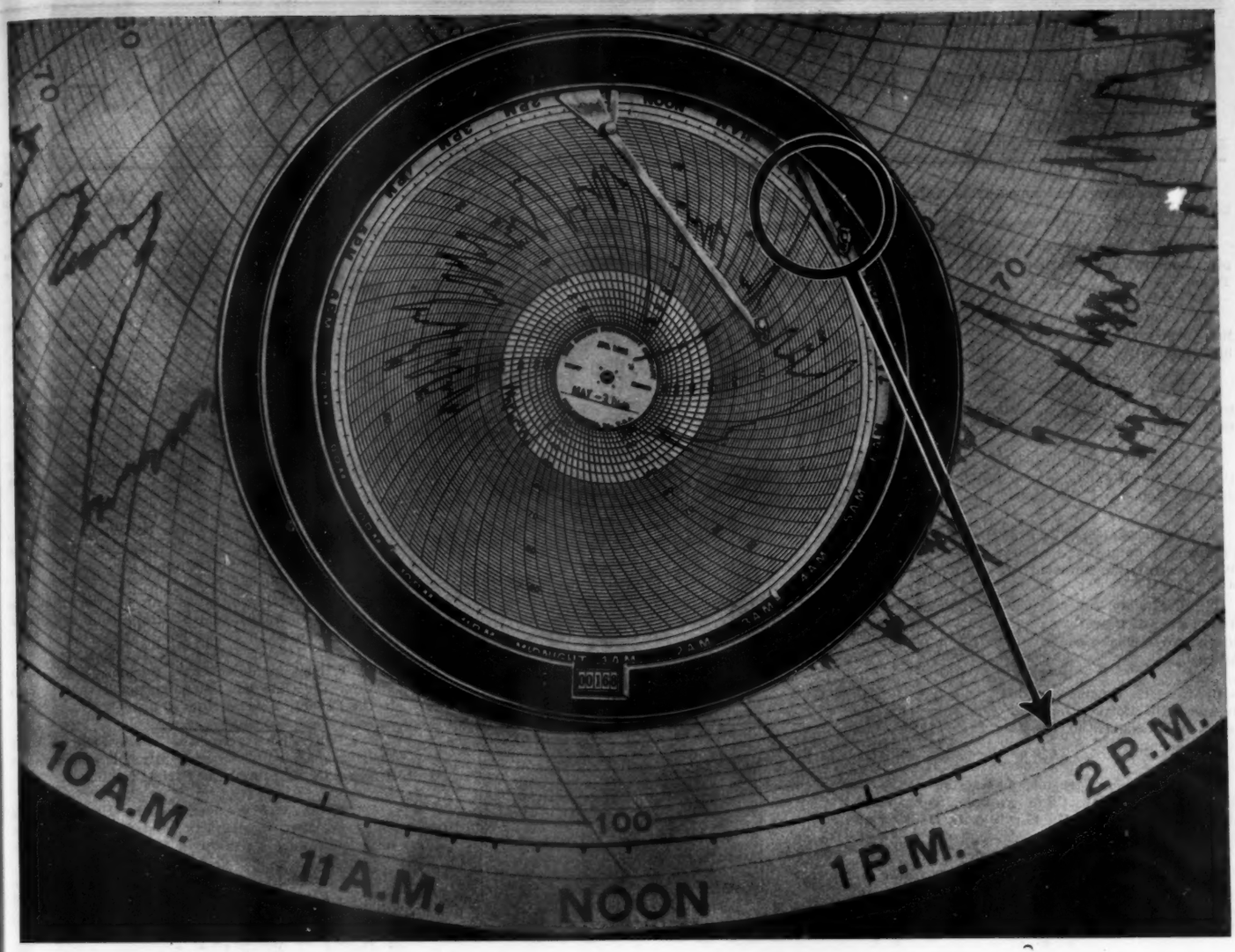
I would be pleased to have the laboratory directions for making the aniline point test of naphtha used in varnish making.—W. F.

Large quantities of the special naphthas are used for the preparation of paint mixtures, lacquers and varnish also as a solvent of gums and waxes, etc., in numerous manufacturing plants. The aniline point test offers a convenient means for determining the purity of a naphtha and gives an indication of the kind of hydrocarbons present. It is the temperature at which equal volumes of the naphtha and dry aniline are completely miscible, that is, the critical temperature of solution. The apparatus for making the test includes: Two test tubes, a 6 and 8-inch tube; copper wire stirrer and thermometer. Fill the 8-inch tube one-third with water, place 3 ml. dry aniline in the smaller tube, add from a pipette 2.5 ml. of the naphtha, warm this over hot water or steam to just above the temperature at which a clear solution appears. Now insert this tube in the 8-inch tube, the water in which has been heated to about the same degree to serve as a water bath. Set the thermometer, encircled with the wire stirrer in the mixture, and stir while the solution slowly cools, read the thermometer to the nearest degree at which the solution clouds. Add 3 ml. more of the naphtha and repeat the test. Add another 0.3 ml. and repeat. The highest temperature obtained, is the aniline point. A low aniline point is desirable and should not be higher than 140° F. or 60° C.

GRAVITY EAST TEXAS CRUDE

(A correction)

The A.P.I. gravity of the crude oil from the Longview-Joiner area of the East Texas Field should have read 39.1° and not 30.1° as given with the analysis on this page of the September 1st issue. —Editor.



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PERSONAL PARAGRAPHS

E. W. Vandervort has moved from Billings, Mont., to Marmarth, N. Dak.

* * *

Roy Dow, sales manager of the International Supply Company, has returned from a business trip to Texas.

* * *

Mark Patton, sales manager for the Hurley Gasoline Company, has returned after a month's vacation in Colorado.

* * *

Campbell M. Hunter, engineer and petroleum technologist of Calgary, Alberta, Canada, has moved to London, England.

* * *

W. D. Shaffer of the Shaffer Tool Works, Brea, Calif., is on an extended trip through the oil fields of East Texas and Oklahoma.

* * *

A. E. Lidderdale of Billings, Mont., representative of Spang & Company, spent several days in Casper, Wyo., recently, on his return from Calgary, Alberta.

* * *

W. H. Shields, superintendent Northern Division, Texas-Empire Pipe Line Company, Tulsa, is spending a two weeks' vacation with his family in New Mexico.

* * *

Charles T. Bingemer, traffic manager of the Western Oil Corporation and Producers Oil Company, has resigned to become a general manufacturers' agent.

* * *

W. W. Sheldon, trustee, Associated Petroleum Engineering Company, San Antonio, Tex., visited offices of his company in Fort Worth, Houston and Tulsa last week.

* * *

A. R. Eppenauer, San Angelo, Tex., operator and president of the Eppenauer Drilling Company, and wife, have left for a pleasure and business trip to Monterrey, Mexico.

* * *

John Fertig of Independence, Kans., vice president of the Producers & Refiners Corporation, and E. C. Wagner, with the same company at Parco, Wyo., were in Casper recently.

* * *

R. R. Hawkins, engineer, The Texas Company, Tulsa, has just returned from two weeks spent in the mountains of northern New Mexico and southern Colorado and reports the fishing good.

* * *

John Steele from the Fort Worth, Tex., office of the Stanolind Pipe Line Company has returned from Tulsa, after relieving R. L. Rowland, assistant general superintendent, who has been on a two weeks' vacation.

* * *

Fred E. Cooper, oil field distributor of Rumely division of Allis-Chalmers Manufacturing Company, has returned from an extended trip through the oil fields of Illinois, Indiana, Michigan, Ohio and West Virginia.

* * *

John H. Langston, chief scout of the Sun Oil Company, and past president of the National Oil Scouts Association, is making a vacation trip to Philadelphia, Pa., and other eastern cities, traveling by boat.

* * *

M. B. Thornell, formerly with the purchasing departments of Barnsdall and Amerada Petroleum Companies, who has been in Colorado for a number of years recuperating from a lung ailment, was a visitor to Tulsa last week.

* * *

Dr. G. S. Hume, of the Geological Survey of Canada, has completed an investigation of the Waterton Lakes area in southwestern Alberta and is now investigating the adjacent Sage Creek and Flathead Valley areas of British Columbia.

Charles S. Biggs, director of Mercury Oils, Ltd., has returned to Calgary, Alberta, after a several months' trip through England and Scotland.

* * *

H. W. Coleman, sales manager of the Simms Oil Company, Dallas, Tex., is spending a vacation in the Ozark Mountains of Missouri with his family.

Men of the Industry

J. ALVIN GARDNER

There might be a question as to whether the oil business or baseball is the major vocation of J. Alvin Gardner, for he takes one as seriously as the other and has made a success in both.

Mr. Gardner, who is a drilling contractor, with his brother, C. T. Gardner, entered the oil industry in Beaumont, Tex., when the Spindletop boom was at its height. He was but a small boy at that time and sold maps and 25-cent samples of oil to those who had come to see the boom. He entered the baseball industry as bat boy in Beaumont. He entered the employ of the Gulf Production Company soon after he got out of the Beaumont high school, remaining with that compnay for 17 years. While with the company his main sport was baseball, which he later made a business.

Mr. Gardner worked in Mexico with the Gulf Production Company, and upon his return to the United States scouted and roughnecked in the fields in Louisiana for the Gulf. From Louisiana he was transferred to Wichita Falls, Tex., at the time of the Burkburnett boom, and was placed in charge of that district. He later was transferred to Fort Worth and made head of the land department in that office. While in Wichita Falls he organized the Gulf Production Company's baseball team. He later purchased and managed the city team. This team he sold to the St. Louis Browns in 1930.

On January 1, 1924, Mr. Gardner resigned from the Gulf Production Company and with his brother entered the contracting business in Wichita Falls. Later he moved to Dallas, but the firm retains an office in Wichita Falls. In 1929 he was made president of the Texas Baseball League, which office he still holds. He was appointed to the board of arbitration of the National Association of Baseball Leagues, and is on the executive board of five of this organization. He is a Knight Templar and a Shriner.

Edward T. Moore, president of the Simms Oil Company, Dallas, Tex., is vacationing in California.

* * *

A. J. Haun, operator of Blackwell, Okla., was a business visitor in Fort Worth, Tex., during the week.

* * *

George T. Hansen, president of the Utah Southern Oil Company, Salt Lake City, was in Casper, Wyo., on business.

* * *

President Amos L. Beaty of the American Petroleum Institute, passed through Fort Worth, Tex., during the week.

* * *

Tidal Oil Company has reopened its office in the Milam Building in San Antonio, Tex., with Adolph Dovre, geologist, in charge.

* * *

R. T. Garland of the Arab Petroleum Company, Tulsa, flew through Fort Worth, Tex., during the week on the way to San Antonio.

* * *

Clinton Murchison, president of the Southern Union Gas Company, and his three sons are spending the summer in Santa Fe, N. M.

* * *

W. T. Nightingale of Rock Springs, Wyo., geologist for the Ohio Oil Company, spent several days in the Casper, Wyo., offices this week.

* * *

R. L. Gay, discoverer of the Zwolle Field in North Louisiana, after attending the Olympic games in Los Angeles, Calif., toured the Pacific Northwest.

* * *

Art Nixon, vice president of the Happy Belting Company, Fort Worth, Tex., and family, have just returned from a vacation in the Ozark Mountains.

* * *

John Lemond, independent operator of Chicago, who has holdings in East Texas, has just completed a trip to that field, stopping in Fort Worth, Tex., en route.

* * *

Paul R. Martin, chief scout of the Pure Oil Company, is spending a vacation with his family in the Ozarks, also visiting Mrs. Martin's relatives in Coffeyville, Kans.

* * *

L. C. Witten has been appointed treasurer of the W. K. M. Company, Inc., Houston, Tex., manufacturers of oil field and pipe line equipment. J. D. Rice has been made secretary of the company.

* * *

J. G. Farquhar, Pittsburgh, Pa., newly elected president of the Big Lake Oil Company, has completed an inspection of the company's holdings in the Big Lake Field, Reagan County, Texas.

* * *

Sinclair Prairie Oil Company has opened offices in San Antonio, Tex., at 1736 Milam Building. Walter Markham is in charge of the land department and Grady Kirby in charge of the geological department.

* * *

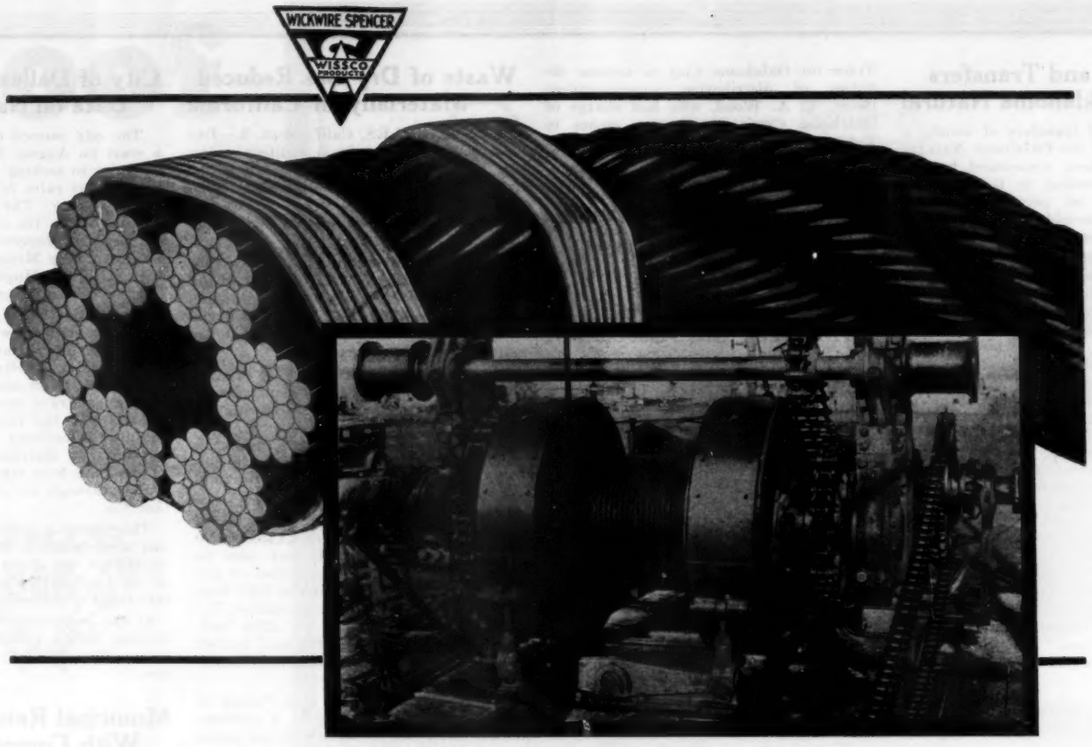
Sam D. Hunter, president of the Pelican Natural Gas Company of Shreveport and prominent independent operator of North Louisiana, East Texas and Arkansas, is spending a vacation in Colorado Springs, Colo.

* * *

Bert Kouns, accompanied by his wife and young son, is enjoying a month's vacation in California and other western points. Mr. Kouns, whose home is in Shreveport, La., is actively interested in the East Texas and North Louisiana areas.

* * *

Lloyd R. Pickrell, umpire and agent of the Kansas Public Service Commission, with headquarters in Wichita, Kans., is moving his office to a suite in the Brown Building, which he will occupy with Marvin Lee, chairman of the Kansas oil advisory committee.



ROTARY

requires an even better rope

"Yes sir, when we worked cable tools we used Wickwire Spencer Wire Rope because it was tough and strong and wasn't quick to wear itself out on the sides of the hole. With this new rotary drilling we jerk and snap on the drill pipe . . . it would kill any ordinary rope. But Wickwire Spencer Rotary Drill Rope has the guts to stand it." And may we add that fishing for a drill pipe is far more costly and troublesome than similar work on a cable tool operation. Quality Rope Pays.

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WIRE ROPE *by Wickwire Spencer*

NATURAL GAS DEVELOPMENTS

Promotions and Transfers Made by Oklahoma Natural

Promotions and transfers of nearly a dozen employes of the Oklahoma Natural Gas Corp. have been announced by the management, according to R. S. Huffman, in charge of personnel. These changes are system-wide and reflect the policy of the company to advance its employes when the opportunity affords.

L. A. Farmer, who has for some time served as assistant chief engineer, has been placed in charge of gas purchases and system load dispatching. Mr. Farmer has been associated with the gas company for more than 11 years and has served in practically every capacity in the operating department. In his new position he will deal directly with more than 1,100 Oklahoma producers from whom the company buys gas.

W. A. Hazard, formerly superintendent of the central transmission division, will take Mr. Farmer's place as assistant to B. L. Maulsby, the chief operating head. Mr. Hazard has been with the company 14 years and likewise has served in every operating capacity.

Lee Prokop, with a 16-year service record, will assume the duties formerly performed by Mr. Hazard. His headquarters will be in Tulsa. Appointment of Noble Nordahl as superintendent of the Bearden Field completes the changes in the transmission division.

Left to right—L. A. Farmer and W. A. Hazard

The post of maintenance and construction superintendent for the entire system will be assumed by W. G. Van Arsdale, who in his new capacity will assist all division heads with jobs of major importance.

In the compressor station division, T. L. Padden of Tulsa will take direct charge of the large station at Kellyville, Okla., and E. E. Regan, chief engineer at Kellyville goes to the Bixby, Okla., station, and Claude E. Myers, chief engineer at Bixby, will take a similar post at the Red Bird, Okla., station.

Three changes were made in the distribution division. A. F. Deen leaves Tulsa for Oklahoma City to assume the duties of distribution superintendent there. T. A. Wood, who had charge of Oklahoma City's distribution, comes to Tulsa in a similar capacity. Both are men of many years' experience.

J. E. Mineo, who has served nearly 27 years in the Tulsa district, becomes superintendent of the Muskogee and Okmulgee, Okla., districts, where his broad experience in distribution systems will be invaluable.

Natural Gas Activities of American Gas Association

The American Gas Association announces that the work of the subcommittee on gas well deliveries is progressing very satisfactorily and the latest report from the Bureau of Mines, co-operating in this work, is that the field work is about completed. A final report will be given probably at the fall meeting in Atlantic City.

E. L. Rawlins of the Bureau of Mines is busily engaged in completing the work necessary to put the report of the submittee on pipe line flow into such shape that it can be published in code book form just after the department's meeting in October.

The joint committee on gas measurement of the American Gas Association and the American Society of Mechanical Engineers, under the chairmanship of T. H. Kerr, has been supervising experimental work at the Ohio State University under the direction of Professor Beitler. The purpose is to obtain data which will aid the committee in determining more accurately the effect of pipe diameters on orifice meter coefficients. This work was started the latter part of March, the tests are nearly completed, and the data obtained is being co-ordinated with other data by members of the joint committee. Mr. Kerr states that his committee plans to have a final report ready for the consideration of the main technical and research committee at their meeting in October.

The chairman of the subcommittee on code for testing natural gas for gasoline content says the report is nearly finished and the revised code will be issued before long.

The work of the subcommittee on conservation data is nearing completion and Mr. Hindes, the chairman, is preparing a report for submission to the main technical and research committee.

Since the Tulsa convention, the subcommittee on pipe line crossings under railroad tracks has met several times with the representatives of the American Railway Engineering Association and the American Petroleum Institute. At the present time the work is at a standstill awaiting action of the American Railway Engineering Association. It is not expected a report will be made before the latter part of next year.

The committee on supply men's fund has decided to allow the two Fellows who now hold the fellows at West Virginia University and the University of Oklahoma to continue their work for another year. It was not possible to complete the work in one year.

The nominating committee has nominated L. K. Langdon, Union Gas & Electric Co., Cincinnati, Ohio, as chairman of the natural gas department for next year, and F. L. Chase, Lone Star Gas Co., Dallas, Tex., as vice chairman. The election will be held during the department's meeting in Atlantic City October 10. The natural gas department will hold its meeting at the Ambassador Hotel Monday afternoon.

Waste of Dry Gas Reduced Materially in California

LOS ANGELES, Calif., Sept. 3.—Dry gas blown into the air in California during the first half of 1932 was only 8.6 per cent of the total of 145,623,516,000 feet produced, figures of C. C. Brown, gas engineer for the State Railroad Commission, reveal.

This compares with dry gas blown into the air amounting to 24.2 per cent of the 211,864,200,000 feet produced in the corresponding half of 1931. The blown gas in the first half of 1930 was 45.6 per cent of the amount produced.

Coupled with the reduction of dry gas waste was an increase in the percentage of dry gas taken by utilities. During the 1932 first half utilities took 49.8 per cent of the production. This compares with 37.5 per cent taken during the initial half of 1931 and 23 per cent of total production in the first half of 1930.

Use of gas for repressuring increased in the 1932 half going up to 6,178,000,000 feet against 5,440,000,000 feet used in the like half of 1931. Utilization of gas for field purposes in the initial 1932 half totaled 54,493,000,000 feet as against 75,637,000,000 feet used in the 1931 half. Sale to utilities in the 1932 half totaled 72,552,000,000 feet as against 79,503,000,000 feet in the 1931 half.

Engineer Brown, states that, "waste of natural gas has ceased to be a problem in this state and probably will not again become one unless there should be a serious breakdown in oil production curtailment." He also points out that due to conditions of oil production it does not appear likely that waste can be reduced under 8 per cent.

Toronto Company Planning Ontario Development Work

CHATHAM, Ontario, Sept. 3.—Vacuum Gas & Oil Co. of Toronto is reported preparing for new and extensive development work in southwestern Ontario. The company, which some years ago drilled for gas in Elgin County and already holds considerable acreage in various Ontario fields, is arranging to take over from E. P. Rowe of Toronto some 2,972 acres in Dereham, Flamboro, Nelson and Orford Townships. Another agreement which will be submitted to a shareholders' meeting next week involves the purchase by unnamed interests of 600,000 shares of the company's stock. The shareholders are being asked to approve the increase of the company's capital from $1,000,000, of which $985,714 is outstanding, to 2,000,000 no-par shares, to facilitate the financing of the new development work. The Orford acreage is in Kent County, east of the Tilbury Field and west of the Vienna gas field; the Dereham holdings are farther east, in Oxford County, and somewhat north of the gas development at Mabee's Corners. Nelson Township is in Halton County, west of Toronto, while Flamboro Township is in Wentworth County, a recognized gas-producing area. Development work in these areas may result in material extension of the present proven fields.

WAINWRIGHT GAS EXTENSION

CHATHAM, Ontario, Sept. 3.—The Wainwright Gas Co., supplying the town of Wainwright, Alberta, with gas produced by the Maple Leaf Oil & Gas Co., has arranged for the laying of about 2,200 feet of additional gas mains. The work will be carried out by gas consumers.

City of Dallas Checking Data on Natural Gas Rate

The city council of Dallas, Tex., made a start on August 31 to check data preparatory to seeking a possible revision in natural gas rates for domestic consumers in that city. The utilities committee, which will do the chcking for the council, met with Supervisor of Utilities J. W. Everman, City Manager John N. Edy and City Attorney Hugh S. Grady and outlined a course of procedure.

Councilman W. H. Painter is chairman of the committee, which includes Mayor Charles E. Turner and Councilman M. J. Norrell. Mr. Painter said that action of the committee in seeking a readjustment of the gas rate would depend to some extent upon the pending hearing before the State Railroad Commission on the gateway or distributing rate schedules of the Lone Star Gas Co., which supplies Dallas through its subsidiary, the Dallas Gas Co.

This hearing, originally set for July, has been deferred, waiting completion of valuations of the Oklahoma properties of the Lone Star Gas Co. being made for the Texas commission.

If the commission should order a reduction in the gateway charge it would materially affect the general rate structure.

Municipal Rates Compared With Company Schedules

The Oklahoma Utilities Association has compiled the following comparison of municipal with company gas rates in Oklahoma. Comparisons are between towns of nearest the same population.

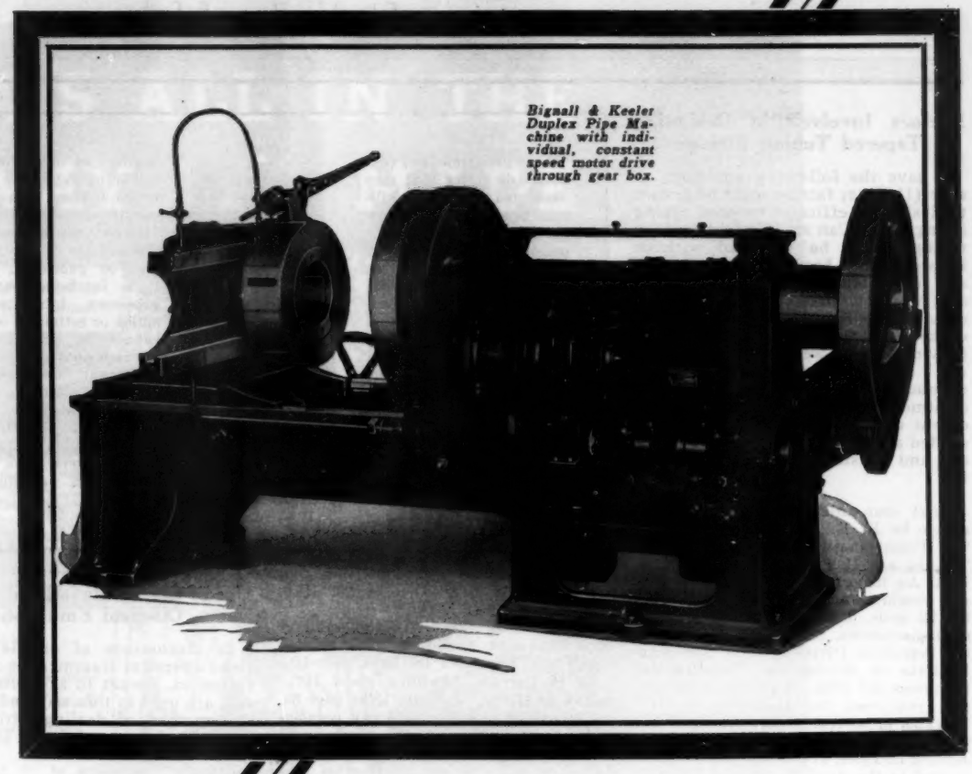
Town—	Net rate per 1,000 (cents)
Castle, Okla., municipal	.60
Agra, company	.58½
Cleveland, municipal	*.55-.60
Chandler, company	.45
Fairfax, municipal	.57
Erick, company	.45
Granite, municipal	.60
Rush Springs, company	.55
Kaw City, municipal	.50
Ringling, company	.45
Mangum, municipal	.50
Drumright, company	.50
Pawhuska†, municipal	.35
Pawhuska, company	.38
Pryor, municipal	.60
Quinton, company	.25
Wann, municipal	.50
Kildare, company	.45
Willow, municipal	.60
Crowder, company	.43
Yeager, municipal	.45
Canadian, company	.43
Average municipal rate first 5,000 ft.	.53
Average company rate first 5,000 ft.	.44.7

*winter months, .55; summer months, .60.
†City system serves about 180 out of 1,600 customers.

GAS REVENUES LOWER

NEW YORK, Sept. 3.—Revenues of manufactured and natural gas utility companies during the first six months of 1932 totaled $347,288,325, a decline of 7.2 per cent from the revenues of $374,229,461 reported during the corresponding months last year, according to statistics compiled by the American Gas Association. Manufactured gas revenues during the first six months of this year were $194,617,810, off 5.2 per cent from the first half of 1931, while natural gas revenues were $152,670,515, a drop of approximately 10 per cent.

Half a Century of Proof



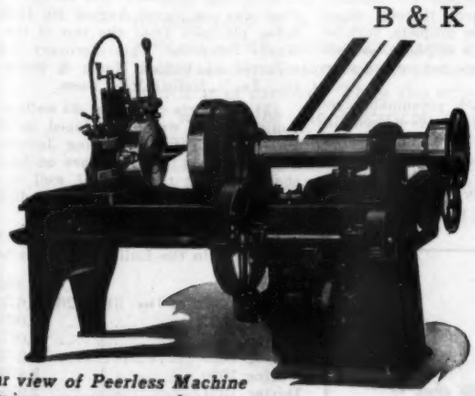
Bignall & Keeler Duplex Pipe Machine with individual, constant speed motor drive through gear box.

PEERLESS B&K DUPLEX P.D.Q.C

WHEREVER pipe threading equipment has been put to the hardest test, Bignall & Keeler threading machines have proven their superior qualities. For half a century they have been in use in the shop and in the field under conditions where equipment meets the hardest work. Their long use and general adoption in the oil field is testimony to their excellence of design and honest manufacture.

B & K machines are unequalled in flexibility and simplicity of operation. With ordinary unskilled labor they turn out the clean-cut, long tapered kind of threads that mean tight joints under high pressure.

Our fifty years experience is yours for the asking. Let us send you our catalog.



Rear view of Peerless Machine showing constant speed motor drive. All gears are shielded.

Bignall & Keeler Machine Works
of the N. O. Nelson Manufacturing Co.
Edwardsville, Illinois

OGJ 9-8 Gray

FIELD PROBLEMS FROM READERS

Edited by Thomas F. Smiley

This department is conducted in order that men connected with the drilling, producing or transporting branches of the petroleum industry may obtain aid in solving problems that confront them in their work. Readers are invited to send questions freely. These questions will be placed in the hands of persons capable of answering them authoritatively, and the answers, based on the best available information, will be published.

Each question should give as much detail as possible, especially if it involves depth of sands, types of sands and operations on adjoining or nearby properties. The source of questions will be considered confidential, and only the initials of the sender will be published. Questions involving patented processes, intricate formulas or estimates of cost cannot be answered. If an immediate answer is important, one will be given by mail when the writer requests it.

In this connection, The Oil and Gas Journal will be glad to publish articles from field men who have devised new methods or improved old ones.

Factors Involved in Designing Tapered Tubing Strings

I have the following questions to ask: (1) What factors must be known to design an efficient tapered tubing string? (2) Can an efficient tapered tubing string be designed without knowing the bottom-hole pressure and temperature? (3) Are data available to show that tapered tubing is consistently more efficient so far as conserving gas and prolonging the flowing life of wells are concerned? (4) I am also interested in the study of mud in Gulf Coast drilling and its treatment with chemicals. To what extent can mud be economically desanded and what is the most economical and satisfactory method?—C. E. L.

First your attention is directed to an article by R. R. Hawkins, engineer for The Texas Company, which appeared in The Oil and Gas Journal of October 8, 1931. An important correction, to which you should refer, appeared in the October 22 issue. The article was published, with discussions, in the Transactions of the Petroleum Division of the American Institute of Mining and Metallurgical Engineers for 1932. It is suggested, too, that you read the discussion by Mr. Hawkins of several papers presented before the American Petroleum Institute meeting in Tyler, Tex., April 14, 1932, and printed in the April 21 issue of The Oil and Gas Journal. It is believed this discussion will answer your question about design of efficient strings of tapered tubing for 7,000-foot deep high-pressure wells. You will find two other articles on tapered tubing in the April 21 issue.

From Mr. Hawkins' discussions it is believed you will find: First, that tapered tubing will not show any marked efficiency in high pressure wells; second, that efficient strings can be designed for wells with limited volumes of gas and relatively low bottom hole pressures without knowing the exact bottom hole pressure and temperature of the wells; third, that tapered tubing has caused old pumping wells to flow in a natural manner and has consistently prolonged the life of such wells.

In regard to Gulf Coast drilling mud, refer to discussions printed in the June 9 issue of The Oil and Gas Journal. This paper with others was presented before the midyear meeting of the A.P.I. in Tulsa.

There are several ways to desand drilling fluid. Many articles on this subject have been carried in The Oil and Gas Journal and following is a list of some of them which contain information that probably will answer your question:

W. A. Sawdon, "Colloidal Quality Fixes Value of Mud," March 12, 1931, page 94.

Doherty, Gill and Parsons, "Drilling Fluid Problems on Gulf Coast," June 11, 1931, page 52.

T. B. Wayne, "Formulas and Calculations for Making Mud Admixtures," June 25, 1931, page 85.

L. G. E. Bignell, "Mud Problems Now Receive Attention," October 16, 1930, page 32.

L. P. Stockman, "Removing Sand From Drilling Mud," October 16, 1930, page 90.

Hallan N. Marsh, "Properties and Treatment of Drilling Mud," October 16, 1930, page 92.

C. P. Parson, "Characteristics of Drilling Mud Fluid," October 16, 1930, page 95.

G. L. Benjamin, "Drilling Mud Reclamation at Ventura," October 23, 1930, page 96.

George L. Morehead, "Cleaning Rotary Mud Important Factor in Modern Drilling Work," December 18, 1930, page 100.

C. P. Parsons, "Drilling Fluid Difficulties at Hobbs," July 16, 1930, page 33.

The extent to which mud can economically be desanded depends upon several factors but it is hoped the articles referred to will give you information that will assist you in solving your problems.

Obtaining the Temperature of Oil and Gas in Deep Wells

I have been having some correspondence with the Department of Commerce and others to ascertain the range of temperatures of petroleum and natural gas as they come from the ground. The Bureau of Mines informs me that you have published an article on this subject. I would appreciate information as to when the article appeared.—M. M. T.

The Oil and Gas Journal of April 19, 1928, contained an article by C. E. Van Orstrand on "Temperature in World's Deepest Wells." The issue of March 8, 1928, contained one by the same writer on "Measuring the Depth of Wells." In addition to these two articles, your attention is called to Production Bulletin No. 205, issued by the American Petroleum Institute, October, 1930, on "Earth Temperatures in Oil Fields." In it are several articles on this subject prepared by investigators acting for the A.P.I. This bulletin sells for $1.50 per copy and can be obtained from the Institute's New York City office, 250 Park Avenue.

Use of Chemicals in Dealing With Oil-field Emulsions

In discussions of oil field emulsions chemical treatment is often referred to. I want to ask what chemicals are used in this way and whether this method of dealing with cut oil has proved successful.—S. D. L.

Chemical treatment of oil field emulsions has been effective on a large scale, both when the chemical treatment has been used alone and when it has been used in combination with some of the other methods. Several groups of chemical reagents are employed in the dehydration of crude oil emulsions. Among these the most satisfactory is the addition of substances which tend to break the protective emulsion films by their tendency to form emulsions of the opposite type from that present in the oil. Among the chemical substances which have been proposed for the breaking of emulsions, the following are enumerated by Jacque C. Morrell and Gustav Egloff:

"1. Dehydrating agents such as calcium chloride and quick lime.

"2. Agents which presumably cause flocculation of the substances composing the protective films and thereby cause coalescence of the water droplets, such as sodium chloride, ferrous sulphate, sodium sulphate, etc. These have not proved very effective.

"3. Substances which presumably react with salts or organic acids present in the external phase of the film, such as caustic soda, lime, sodium bicarbonate; for example these may react with naphthenic and other acids to form water-soluble soaps and the water-in-oil emulsions will tend to be reversed and thus broken.

"4. Substances which tend to break the protective films by their tendency to form an emulsion of the opposite type from that present in the oil. This group includes iron oxides and other finely divided salts, such as clays, silica, soaps, gums, starches, albuminous matter, etc. In general these substances tend to stabilize oil-in-water emulsions and thus to break water-in-oil emulsions. The finely divided soils, when effective, probably act in the same manner, since it is well known that some finely divided solids are good emulsifying agents for oil-in-water emulsions.

"5. Electrolytes, which presumably neutralize the electrical charge of the emulsified water droplets. Among these are acids such as sulphuric acid, acetic acid and salt solutions, such as ferric nitrate and ferric chloride.

"6. Solvents which dissolve the material making up the protective film of the emulsion. Among such substances are carbon disulphide, carbon tetrachloride, benzol, acetone, alcohol, ether and gasoline. Besides their solvent action they tend to decrease the viscosity of the external phase and thus reduce the stability of the emulsion. In general, these solvents are used to break emulsions only on a laboratory scale for determination of the water content of the emulsion.

"Commercial de-emulsifiers in general act like one or several of the groups mentioned."

Facts and Figures Concerning Wells in the Luling Field

I would appreciate it if you would give me some information on the following questions: (1) When was the Edwards lime first discovered in the Luling Field? (2) Are the wells first brought in still producing and approximately how much have they produced? (3) What is a conservative estimate of the recoverable oil per foot per acre of Edwards lime sand? (4) Is production in Edwards lime sand subject to rapid decline after two or three years?—R. D. S.

(1) The discovery well in the Luling Pool was completed August 10, 1922, oil being obtained from the top of the Edwards limestone. This discovery well is reported as United North & South Oil Co., Inc.'s Rafeal Rios lease.

(2) Reports show that 43 wells in the Luling Field were abandoned in 1931. The total number producing January 1, 1932, was 538. No facts are at hand to show whether the original well is still producing or how much the individual wells have produced.

(3) Records show that the production from wells in the Luling Field has been:

	Bbls.
Aug. 10, 1922 to Dec. 31, 1926	31,672,000
During 1927	6,099,264
During 1928	5,097,808
During 1929	4,246,861
During 1930	3,476,058
During 1931	2,955,178
First half 1932	1,345,276
Total	54,892,445

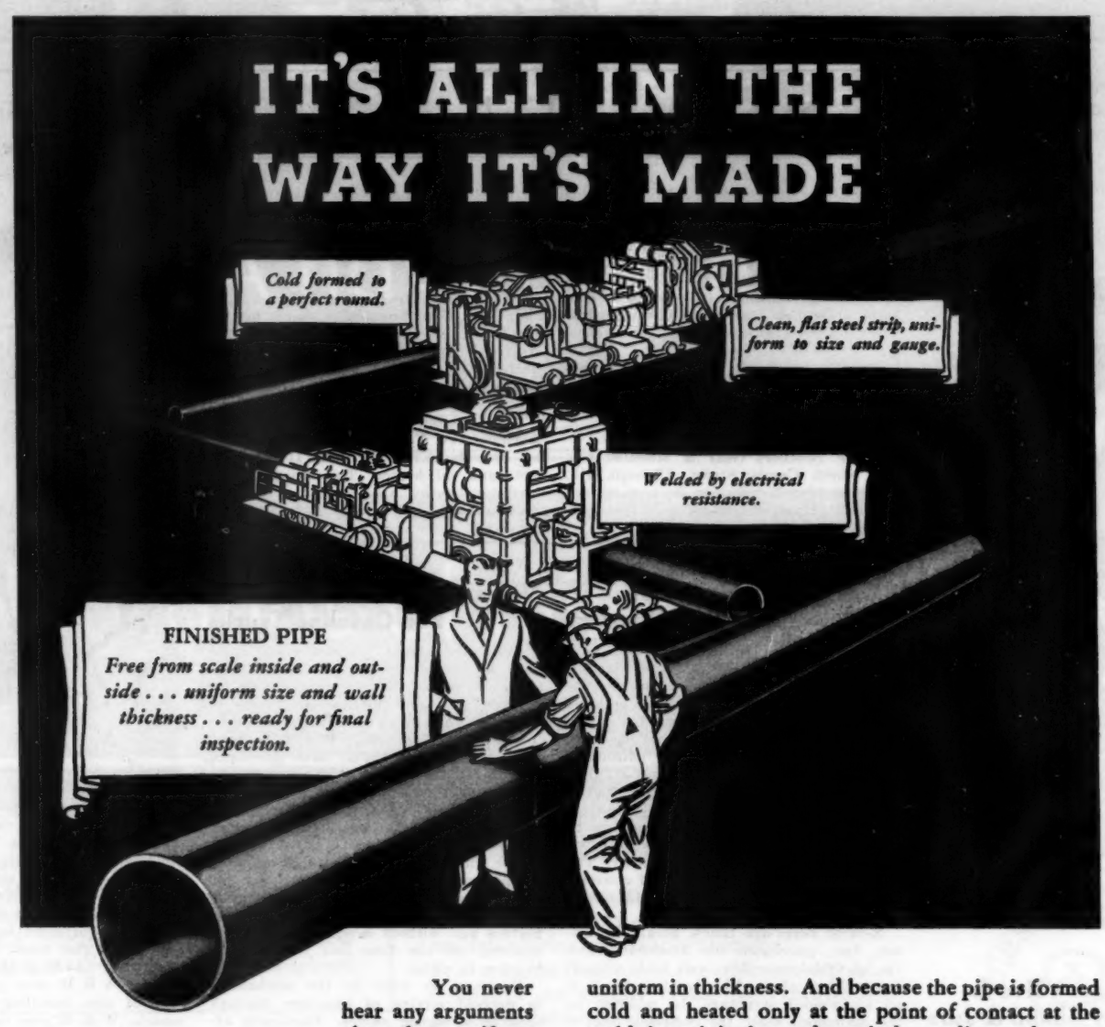
Acreage in field 2,100 acres. Yield per acre approximately 26,100 bbls. Thickness of pay ranges from 50 to 150 feet.

(4) The foregoing table should answer this question. Edwards lime is variable as to porosity.

Why Was It Called That?

SWAB

The word "swab" has appeared in several languages, but is believed to have come into the English from the Swedish "swabb," a mop of rope or yarn used in cleaning the deck of a vessel. It also designates a sponge or similar substance attached to a rod or handle for cleaning the bore of a firearm. It is in this latter sense that the word came to be applied to the piece of equipment employed for removing oil or water accumulated in the casing or tubing of a well. The swab sometimes is resorted to as a means of causing a well to resume flowing. Operated on drilling tools, it is run to the bottom of the hole and then withdrawn, creating a suction which may start the oil running to the surface.


IT'S ALL IN THE WAY IT'S MADE
Cold formed to a perfect round.
Clean, flat steel strip, uniform to size and gauge.
Welded by electrical resistance.
FINISHED PIPE
Free from scale inside and outside . . . uniform size and wall thickness . . . ready for final inspection.

You never hear any arguments about how uniform the wall of Republic Electric Weld Pipe is—or how round it is—or how clean. And it's all because of the way it's made.

Flat strip steel rolled to uniform thickness is formed cold to a perfect round. This is the only process which insures the inside surface of the pipe being exactly the same as the surface of the strip from which it is formed. Then the edges under pressure are welded by the electrical resistance method—Johnson patents owned by Republic. Because the steel strip is not heated it forms no scale—the finished pipe is clean inside and outside. Because the strip is of uniform gauge the wall of the pipe is absolutely uniform in thickness. And because the pipe is formed cold and heated only at the point of contact at the weld, its original roundness is never distorted.

Translate these qualities into economies in pipe line installation—round ends that always meet, save welding time, make tight joints—pipe walls without thin spots, often permitting the use of lighter wall pipe just because of this insured uniformity of wall thickness—so clean that loose scale will not cause trouble when liquids start to flow through the line, and so smooth outside that it is particularly well suited for use with mechanical couplings of the Dresser type.

Read this again and then ask us to send you all the facts about Republic Electric Weld Pipe.

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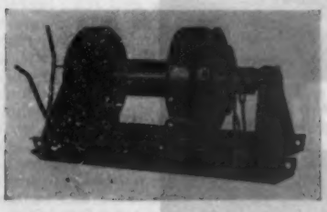
ELECTRIC WELD
CASING • TUBING

NEW AND IMPROVED EQUIPMENT

National Supply Offering New Type of Tubing Hoist

The National Supply Companies announce their new type CF tubing hoist, of modern design, light weight and extremely rugged construction. It has been



developed to meet the demand for a stronger hoist of this type, and is particularly suitable for concrete derrick floor installations. It is a compact, self-contained friction clutch unit with a rated line pull capacity of 18,000 pounds, and suitable for use with nonreversing prime movers through either standard rigs or reduction gears.

The frame is of all-steel welded construction, exceptionally strong and rigid. Bearing boxes welded in the frame are permanently in line.

One of the unique features of this hoist is the electric welded steel drum, light in weight but possessing excess strength. Because of the welded construction, flanges cannot spread and the drum unreels freely with a light line load.

Two demountable cast iron brake rims are bolted to the drum flanges, providing ample braking capacity for lowering rods or tubing with speed and safety. The single cone type clutch is designed to transmit high torque with low unit pressure. Hycoe lining is used for both brakes and clutch. Alemite lubrication is used throughout.

New Diaphragm Valve Is Offered by Shand & Jurs

An improved type of diaphragm valve is offered by the Shand & Jurs Co., Berkeley, Calif. The diaphragm has been extended and set away from the body of the valve to prevent transmission of heat, particularly on high-temperature installations. The bearing, which contains the spring and provides change of tension by merely screwing clockwise or counterclockwise, contains a frictionless bearing for the shaft.

The gland is of a new type known as a lantern gland. It provides ample space for greasing and maintaining grease through an Alemite fitting or other means, transmitted through an opening on the outside edge of the gland yoke. The diaphragm housing and gland yoke are screwed together. This makes a sturdy unit, protection of which permits the use of a smaller diameter shaft, thus reducing friction to a minimum according to the manufacturers.

The entire upper structure of the valve may be covered with a sheet metal casing, which can be removed by loosening two screws. The valve can be made either reverse or direct acting by merely taking the bottom cover off completely, removing the top yoke and placing it on the bottom.

The Well Pump Co., 215 West Superior Street, Chicago, has introduced its improved Well Ever Flo oil display. This is a motion advertisement, which presents a continuous stream of flowing oil from a scientific flask into an oil can.

Notes About Trade Literature

The Swartout type A inverted bucket trap is described in detail in a bulletin issued by the Swartout Co., 18511 Euclid Avenue, Cleveland, Ohio.

The C. A. Fischer Co., Fort Worth, Tex., is distributing a folder which contains a detailed description, with illustrations, of the Multiseat boiler gauge cock.

The Emsco D+B inverted liner pump is the subject of a bulletin obtainable from the Emsco Derrick & Equipment Co., Los Angeles, Calif.

Foote Brothers Gear & Machine Co., 215 North Curtis Street, Chicago, Ill., has ready for distribution its new revised No. 302 "Hygrade" worm gear speed reducer catalog.

A copyrighted booklet of 16 pages of interest to all owners of trucks and automobiles is "Repairing for Profit," sent on request to the Linde Air Products Co., New York.

"Take This Tip From the Flex-Set" is the title of a broadside issued by the Broderick & Bascom Rope Co., 4203 North Union Avenue, St. Louis, Mo., dealing with Flex-set preformed wire rope center cables.

The Griscom-Russell Co., 285 Madison Avenue, New York, has published a leaflet describing its new G-R G-Fin storage tank oil heater. This apparatus is used for heating viscous oil to be withdrawn from field tanks, tanks on shipboard and other types of oil storage tanks.

Black, Sivalls & Bryson Move Into New Quarters

Black, Sivalls & Bryson, Inc., have moved their general offices from Bartlesville, Okla., where they had been since 1904, to their own new office building at 2131 Westwood Boulevard, Oklahoma City, Okla. The general offices of B. S. & B. and its manufacturing subsidiary are now consolidated in the same building.

Because of the erection of the American Tank & Equipment Corp.'s new plant in Oklahoma City, it was decided to merge the general offices of the two companies for greater efficiency and economy. The new quarters are accessible and convenient to nearly all points in the Mid-Continent Field.

Several years ago Black, Sivalls & Bryson, Inc., purchased the American Tank Co. of Oklahoma City, and built a modern welding plant. The building itself is an all welded structure. In addition to the mammoth shop, the company built a heat treating oven 80 feet long, large enough to house a Pullman car.

The name of the subsidiary company was changed to the American Tank & Equipment Corp. because it was manufacturing the Improved American oil and gas separators, high pressure vessels and other equipment, in addition to the welded tanks. The parent company manufactures wood, and bolted steel tanks.

Valve Manifold Made For Gasoline Trucks

With the advent of third grade gasoline, a demand has arisen for a valve that will permit three-way operation for dumping the gasoline load from any of the three compartments through a meter. To serve this purpose, Shand & Jurs, Inc., of Berkeley, Calif., have developed the Hydrafold unit, designed primarily for use on trucks having meters, so that only one meter is necessary. It is adapted also to trucks not equipped with meters.

The unit is equipped with illuminated compartments on top of a cylinder for designating the product being dispensed. It is also made without the illuminating feature and without a separate valve for shutting off the flow line from siphon breaker to meter.

Provision is made in the mechanism to prevent mixing of gasolines through opening of wrong valves. Particular attention was given in designing the unit to increase the flow and to reduce weight to the minimum. The illuminated compartment is vapor-proof and has provision for changing glasses which can be furnished in colors to match the product. The name of each grade of gasoline can be painted on the glass. Safety devices reduce fire hazards and loss resulting from collisions.

Among the Equipment Houses

L. F. McKay, formerly secretary of the American Flange & Manufacturing Co., Chicago., has joined the Wackman Welded Ware Co., St. Louis, Mo., as assistant to the president, in charge of package engineering.

Walter Geist, assistant manager of the milling machinery department, including the Texrope drive division, of the Allis-Chalmers Manufacturing Co., sailed for Europe on the Europa, to spend three months studying conditions and visiting Allis-Chalmers manufacturing and sales organizations in England, France, Germany, Italy and other countries.

A. M. Castle & Co. have been appointed distributors of the Babcock & Wilcox Tube Co.'s products in the Chicago and Pasific Coast territories.

Production of boiler units for the new General Electric oil-burning furnace has been stepped up 100 per cent to meet demands, it is announced by the General Electric Co. in Pittsfield, Mass. All available electrical welders have been recalled for this work.

According to announcement by the Babcock & Wilcox Co., 85 Liberty Street, New York, all its purchasing will be concentrated at its Barberton, Ohio, works after September 1.

L. A. Graham has been appointed sales manager of the Falk Corp., Milwaukee, Wis., and M. A. Carpenter has been named sales promotion manager. Several new products have been added to the company's line of gears, speed reducers, etc.

Men Well Known in the Equipment Field

A. S. CRUTCHER

A. S. Crutcher, since 1926 active in the development and sale of specialized pipe line equipment, has been named manager of sales of the pipe line equipment division of the W-K-M Co., Inc., Houston, Tex. Mr. Crutcher recently returned from a three months' trip to England and France, where he negotiated the sale of more than 16 carloads of W-K-M pipe line equipment for use on the Iraq pipe line. The lines Mr. Crutcher will handle include W-K-M pipe cleaning machines, W-K-M pipe painting machines, W-K-M pipe handling equipment in all models, W-K-M pipe cradles, etc.

J. D. Cummings, inventor and patentee of many items of W-K-M pipe line equipment, will collaborate with Mr. Crutcher in the sale of W-K-M equipment. Both men are well known to pipe line executives, engineers and field men throughout the United States. Mr. Crutcher will spend part of his time abroad, making contacts in foreign countries and advising on equipment suitable for use on foreign pipe line projects.

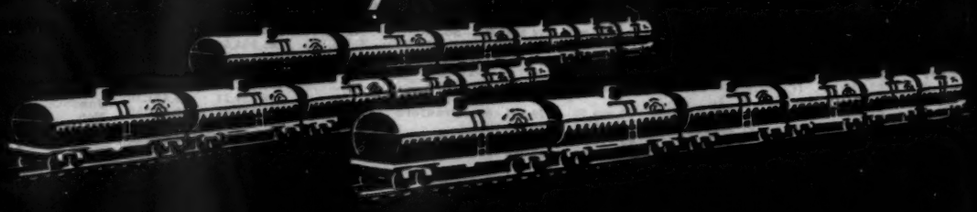
Mercon Manufacturing Two New Pressure Controllers

The Mercon Regulator Co., 1 Lasalle Street, Chicago, offers another contribution to boiler feed control problems through its new differential pressure controllers, series B and C.

In the new series B design the differential may be manually adjusted at all times to any value which it is desired to maintain. The advantages of constant differential are retained with the added flexibility which permits alteration of adjustment when unusual operating conditions warrant such action.

In the series C design the differential is automatically controlled to vary as the square of the steam demand. This results in the rate of boiler feeding being almost exactly synchronized with boiler load, a feature particularly adapted to modern station equipment where the trend runs toward flash type boilers, liquid and gaseous fuels, and furnace conditions rapidly responsive to load.

An army of tank cars



A navy of tankers

Thousands of miles of pipelines!

That's the CITIES SERVICE story—3200 tank cars, 15 huge tankers, 2500 miles of pipeline speed CITIES SERVICE crude oils and finished products from the wells to refineries and markets.

A carefully planned, wide-spread and efficient transportation system is one of the major reasons why Cities Service petroleum products should find a place on your next bid list.

This system, which includes more than 2500 miles of pipelines (including a half interest in the 904-mile Texas-Empire pipeline), 15 large tankers and more than 3200 owned and leased tank cars, makes possible the following benefits:

1. Cities Service refineries have, at all times, an adequate supply of the necessary crudes—no delays—no forced substitutions.
2. Maximum freedom in the selection of crudes—always the proper crude for refining the proper finished product.
3. Through its transportation system Cities Service experts can keep constant check on the quality of the crude from the well to the refineries, and speed the finished product to your tanks in its more than 3200 tank cars.

If you have never placed Cities Service on your bid list, may we have a place the next time requests are issued? Please address the nearest subsidiary listed below.

CITIES SERVICE OILS

ONCE - ALWAYS

Cities Service Petroleum Products are available through the following subsidiaries and refineries:

Name	Headquarters
CITIES SERVICE OIL COMPANY (Delaware)	Tulsa, Okla.
CITIES SERVICE OIL COMPANY (Michigan)	Adrian, Michigan
CITIES SERVICE OIL COMPANY (Ohio)	Cleveland, Ohio
CITIES SERVICE OIL COMPANY, LTD.	Toronto, Ont., Canada
CITIES SERVICE REFINING COMPANY	Boston, Mass.
CITIES SERVICE EXPORT OIL CO.	New York, N. Y.
CREW LEVICK COMPANY	Philadelphia, Pa.
EMPIRE OIL AND REFINING COMPANY	Tulsa, Okla.
INTER-STATE OIL COMPANY	La Crosse, Wis.
LINDSAY-McMILLAN COMPANY	Milwaukee, Wis.
LOUISIANA OIL REFINING CORP. (LORECO petroleum products)	Shreveport, La.
C. H. LOCKWOOD OIL COMPANY	Kenosha, Wis.
A. R. NEWCOMBE OIL COMPANY	Kingston, N. Y.
WINONA OIL COMPANY	Winona, Minn.
AUTO GAS AND SUPPLY COMPANY	Winona, Minn.

Refineries

CITIES SERVICE REFINING COMPANY	East Braintree, Mass.
CREW LEVICK COMPANY	Petty Island, N. J.—Titusville, Pa.
EMPIRE OIL AND REFINING COMPANY	Ponca City, Okla.—Okmulgee, Okla. Gainesville, Texas—East Chicago, Ind.
LOUISIANA OIL REFINING CORP. (LORECO petroleum products)	Bossier City, La. Gas Center, La.

The "Empire group" is the common designation for a number of Cities Service oil subsidiaries occupying an important position in the petroleum industry in the great Mid-Continental field of the United States. Companies in this group include Empire Gas & Fuel Co., Empire Oil & Refining Co., Indian Territory Illuminating Oil Co., and Cities Service Oil Co. Through these and other companies, Empire produces, transports, refines and markets a complete line of petroleum products.

Cities Service Oils and Gasolene

Oklahoma-Kansas and Eastern Pipe Line Report

OKLAHOMA-KANSAS
Pipe Line Statement for July

Runs

	Month bbls.	Dly. av. bbls.
Gulf P. L. Co.	1,552,252	50,072
Texas P. L. Co.	648,246	20,911
Magnolia Pet. Co.	1,206,952	38,934
Empire P. L. Co.	1,813,901	58,674
Cosden P. L. Co.	550,248	17,750
Stanolind P. L. Co.	2,650,500	85,500
Oklahoma P. L. Co.	1,893,004	61,065
Other lines	5,712,000	184,258
Total July	16,032,104	517,165
Total June	15,594,950	519,832
Difference	437,154	2,667

Shipments

Gulf P. L. Co.	1,953,357	63,012
Texas P. L. Co.	875,544	28,243
Magnolia Pet. Co.	1,391,845	44,898
Empire P. L. Co.	2,132,851	68,802
Cosden P. L. Co.	538,328	17,365
Stanolind P. L. Co.	3,648,700	117,700
Oklahoma P. L. Co.	3,047,825	66,059
Other lines	5,416,000	174,710
Total July	18,004,450	580,789
Total June	15,652,178	555,073
Difference	2,352,272	25,716

Stocks

Sinclair Prairie Oil Co.*	34,505,000
Gulf P. L. and Gypsy Oil Co.	7,472,037
The Texas Company	2,566,373
Magnolia Petroleum Co.	7,858,033
Empire P. L. Co.	5,196,710
Mid-Continent Petroleum Corp.	2,394,483
Stanolind Crude Oil Pur. Co.*	15,939,000
Oklahoma P. L. Co.	2,035,457
Carter Oil Co.	2,638,254
Other lines*	15,989,000
Total July	96,594,346
Total June	97,460,908
Difference	865,952

*Estimated. Stanolind Pipe Line Co.'s shipments include Texas crude oil.

EASTERN PIPE LINE REPORT FOR MONTH OF JULY

Runs From Wells

In the following table will be found the regular receipts from wells by various pipe lines in New York, Pennsylvania, West Virginia, Ohio, Kentucky, Illinois, Indiana and Michigan for June and July:

	June, 1932	July, 1932
Nat. Transit.	144,952.51	257,678.41
S. W. Pa. P. L.	74,626.04	66,303.16
Eureka P. L.	234,902.07	254,345.02
Buckeye P. L. (Macksburg)	255,814.51	234,866.44
Buckeye P. L. (Cleveland)	12,368.10	10,799.40
Buckeye P. L. (Lima, etc.)	90,909.75	79,881.40
Indiana P. L.	3,132.06	2,177.70
N. Y. Transit	43,716.35	38,663.85
Tide Water P. L.	24,651.06	22,943.60
Pure Oil	397,731.81	444,629.57
Stoll Oil Ref.	39,472.90	36,275.24
Bradford Transit	419,696.68	393,640.88
Ashland Ref.	139,179.80	123,060.97
Total	1,921,155.54	1,965,470.64
Daily average	64,371.85	63,402.28

Petroleum Deliveries

The following tables exhibit the shipments or regular deliveries of various pipe lines in New York, Pennsylvania, West Virginia, Ohio, Kentucky and Indiana for June and July:

	June, 1932	July, 1932
Nat. Transit	531,479.14	496,936.68
S. W. Pa. P. L.	347,391.97	516,488.97
Eureka P. L.	326,763.56	316,502.51
Buckeye P. L. (Macksburg)	271,362.46	268,503.80
Buckeye P. L. (Cleveland)	1,955.30	1,231.63
Buckeye P. L. (Lima, etc.)	1,425,243.21	1,643,800.68
Indiana P. L.	1,000,264.12	985,847.68
Southern P. L.	65,383.50	65,700.09
N. Y. Transit	194,532.17	208,180.19
Northern P. L.	98,284.38	105,941.67
Tide Water P. L.	501,452.99	428,003.22
Pure Oil	487,086.69	566,396.09
Bradford Transit	436,376.77	423,645.01
Tuscarora Dev.	360,897.93	262,578.32
Total	6,048,975.19	6,288,655.47
Daily average	201,632.51	202,859.86

Gross Stocks

The gross stocks held by various pipe lines in the oil-producing sections of New York, Pennsylvania, West Virginia, Ohio, Indiana and Kentucky at the close of June and July:

	June, 1932	July, 1932
Nat. Transit	704,495.00	660,353.47
S. W. Pa. P. L.	524,603.77	544,191.17
Eureka P. L.	1,172,808.19	1,151,492.16
Buckeye P. L. (Macksburg)	306,904.25	287,514.51
Buckeye P. L. (Cleveland)	30,067.94	32,720.25
Buckeye P. L. (Lima, etc.)	3,311,429.11	3,959,286.50
Indiana P. L.	473,754.90	460,012.73
Southern P. L.	163,226.94	158,254.77
N. Y. Transit	105,004.59	97,545.73
Northern P. L.	211,480.61	271,630.29
Tide Water P. L.	655,576.80	622,396.64
Pure Oil	706,572.57	676,763.36
Tuscarora	8,825.24	8,601.80
Bradford Transit	257,371.07	246,193.50
Total	8,732,724.69	8,176,956.88
Decrease	103,002.20	555,767.81

Grades of Oil

The following table shows the amount of different grades of oil held by the eastern pipe lines at the close of June and July showing gross stocks of the above fields:

	June, 1932	July, 1932
Pennsylvania	3,006,429.19	2,938,136.48
Lima	590,135.35	457,722.43
Kentucky	10,008.41	1,205 71
Mid-Continent	4,467,170.93	4,145,012.16
Illinois	112,915.03	3,491.31
Michigan	636,065.79	596,338.79
Total	8,732,724.69	8,176,956.88

Daily Average Runs

The following table shows the daily average runs of the Pennsylvania, Lima and Kentucky oil fields for the past four years:

	1929	1930	1931	1932
Jan.	51,749	75,907	53,939	53,501
Feb.	51,833	79,256	55,163	55,498
Mar.	54,252	76,685	54,331	57,199
April	53,444	84,536	54,914	57,348
May	59,902	70,546	53,344	59,105
June	53,833	75,420	54,110	64,371
July	66,087	68,921	50,728	63,402
Aug.	66,087	54,291	51,503	.....
Sept.	67,315	56,595	61,345	.....
Oct.	76,093	58,179	65,595	.....
Nov.	74,531	52,322	59,819	.....
Dec.	74,561	53,999	61,835	.....

Daily Average Shipments

The following table gives daily average shipments from the Pennsylvania, Lima and other fields for the past four years:

	1929	1930	1931	1932
Jan.	165,721	217,623	175,369	186,551
Feb.	159,387	224,355	183,494	189,854
Mar.	161,474	228,846	189,508	188,792
April	169,737	241,845	191,460	202,036
May	184,281	248,382	199,247	201,404
June	185,404	234,401	221,155	201,632
July	194,763	207,094	211,632	202,859
Aug.	194,946	205,596	224,166	.....
Sept.	201,214	182,999	217,527	.....
Oct.	191,367	187,675	210,831	.....
Nov.	202,743	146,638	196,425	.....
Dec.	186,357	143,001	176,241	.....

Gross Stocks

In the following table will be found the gross stocks of the various lines of the Pennsylvania, Lima and Kentucky oil fields, including oil received from other lines at the close of each month for the past three years:

	1930	1931	1932
Jan.	12,220,045	11,331,092	9,023,914
Feb.	12,991,561	11,506,489	8,974,359
March	13,247,217	11,012,162	8,802,192
April	13,223,961	11,044,481	8,908,661
May	13,052,958	10,726,239	8,835,726
June	13,396,855	9,903,349	8,732,724
July	13,268,562	9,569,549	8,176,956
Aug.	13,047,051	9,192,467	.....
Sept.	12,812,018	8,492,431	.....
Oct.	12,437,553	8,417,694	.....
Nov.	11,851,320	8,326,326	.....
Dec.	11,751,952	9,119,032	.....

The Illinois Field

The following table gives the report of the Illinois Pipe Line Co. in Illinois:

	Bbls.
Gross stocks, August 1	517,818.27
Runs from wells	443,687.29
Other receipts	78,372.53
Regular deliveries	258,078.53
Other deliveries	252,619.59

The amount of Illinois oil run by the Tide Water Pipe Co. in July was 22,948.66 bbls. Deliveries were 26,458.66 bbls. Adding these figures to those of the Illinois Pipe Line Co. makes the runs and deliveries as follows:

1932—	Runs	Deliveries
July	466,635.89	284,537.18
1931—		
January	468,429.04	669,573.19
February	429,284.54	461,262.85
March	424,638.23	356,663.26
April	431,314.98	282,532.65
May	433,231.80	322,513.95
June	510,805.78	320,258.13
July	520,009.38	289,219.05
August	476,622.56	393,231.98
September	492,183.83	323,012.50
October	498,124.13	325,834.95
November	470,302.63	281,258.43
December	515,771.28	306,623.19
1932—		
January	500,177.12	246,634.10
February	482,561.50	186,010.30
March	565,538.70	270,617.75
April	461,920.92	285,817.96
May	521,884.64	279,859.88
June	501,873.26	263,703.70

Tide Water Pipe Co., Ltd., also delivered in July, 92,133.05 bbls. Oklahoma oil.

Average Daily Imports of Crude and Refined Oil at Principal United States Ports

Average barrels per day in 1931-32—	Atlantic Ports: Baltimore	Boston	New York	Philadelphia	Others	Total	Gulf Coast Ports: Galveston	New Orleans, Baton Rouge	Port Arthur, Sabine Pass	Tampa	Total	Total all ports
August	22,612	15,581	91,742	22,387	25,741	188,064	4,161	2,516	.....	3,162	9,839	197,903
September	27,067	7,267	106,857	30,099	23,967	194,267	4,833	3,333	.....	.....	13,166	197,433
October	53,710	14,484	100,774	26,742	40,645	236,355	6,097	6,871	2,097	1,838	16,903	253,258
November	48,033	28,800	51,667	28,600	13,967	170,067	8,933	10,833	3,033	1,367	19,166	189,233
December	20,258	16,806	121,807	31,645	34,258	224,774	1,968	4,355	.....	.....	6,323	231,097
1932—												
January	19,161	8,161	104,065	24,194	34,903	190,484	4,871	7,226	2,096	1,484	15,677	206,161
February	32,483	16,517	128,483	28,862	34,552	240,897	2,034	5,207	4,310	1,379	12,930	253,827
March	25,806	10,516	167,806	28,677	48,129	290,935	5,936	39,774	.....	1,516	47,226	338,161
April	37,167	18,467	158,233	38,733	39,400	292,000	6,767	44,600	2,167	3,333	54,867	346,867
May	31,161	2,065	170,226	50,774	14,935	269,161	903	710	4,194	1,516	7,323	276,484
June	30,900	11,700	199,300	22,733	29,900	294,533	.....	.....	12,867	.....	12,867	307,400
July	2,613	2,161	62,968	14,935	2,139	84,806	.....	.....	.....	.....	.....	84,806

Average Daily Receipts of California Crude and Refined Oil at Atlantic and Gulf Ports

Average barrels per day in 1931-32—	Atlantic Ports: Baltimore	Boston	New York	Philadelphia	Others	Total	Gulf Coast Ports: Galveston	New Orleans, Baton Rouge	Port Arthur, Sabine Pass	Tampa	Total	Total all ports
August	3,452	.....	16,419	7,419	4,290	31,580	.....	.....	.....	.....	968	32,548
September	4,267	3,667	13,933	4,699	7,367	33,933	.....	.....	.....	.....	4,000	36,933
October	2,355	1,129	19,290	16,709	9,323	48,806	.....	.....	.....	.....	3,323	52,129
November	1,000	.....	22,800	11,567	.....	35,367	.....	.....	.....	.....	3,366	38,733
December	3,161	.....	23,484	8,839	6,032	40,516	.....	.....	.....	.....	7,742	48,258
1932—												
January	3,871	1,710	14,483	3,774	5,710	29,548	.....	.....	.....	.....	.....	29,548
February	3,049	.....	9,103	4,862	.....	17,034	.....	.....	.....	.....	2,483	19,517
March	1,516	.....	6,065	.....	.....	7,581	.....	.....	.....	.....	.....	7,581
April	3,500	.....	19,333	3,867	4,833	31,533	.....	.....	.....	.....	.....	31,533
May	3,161	.....	15,226	16,774	3,871	40,032	.....	.....	.....	.....	.....	40,032
June	2,500	.....	17,333	3,933	833	24,600	.....	.....	.....	.....	.....	24,600
July	2,323	.....	22,226	8,677	8,935	42,161	.....	.....	.....	.....	.....	42,161

Gross Production of Crude Oil in the United States for 12 Months

(In Barrels of 42 Gallons)

1931—		California	Oklahoma	Texas	Kansas	Arkansas	Louisiana	Rocky Mts.	Eastern	Total
July:	Month	16,093,322	16,420,050	33,827,213	3,089,832	1,287,535	1,715,730	2,905,909	3,341,000	78,680,571
	Daily average	519,139	529,680	1,091,200	99,672	41,535	55,345	93,739	107,774	2,538,078
August:	Month	15,468,984	9,517,379	32,279,816	3,141,333	1,165,569	1,584,444	2,807,143	3,167,000	69,331,558
	Daily average	595,451	307,009	1,041,284	101,333	37,599	51,111	90,553	102,161	2,236,502
September:	Month	15,180,610	7,946,850	28,981,525	3,147,030	1,138,350	1,641,384	2,761,230	3,632,000	64,429,039
	Daily average	506,020	264,896	966,051	104,901	37,945	54,713	92,041	121,067	2,180,968
October:	Month	15,651,983	12,951,893	30,725,175	3,177,066	1,172,389	1,822,255	2,797,597	3,900,000	72,198,356
	Daily average	504,903	417,803	991,134	102,486	37,819	58,782	90,247	125,807	2,328,979
November:	Month	14,997,700	16,430,720	28,860,561	3,121,670	1,130,700	1,851,577	2,766,390	3,639,000	72,748,328
	Daily average	499,923	547,691	962,018	104,389	37,690	61,719	90,213	121,300	2,424,946
December:	Month	15,560,934	16,598,299	27,767,651	3,198,642	1,082,148	1,971,817	2,816,759	3,645,000	72,641,300
	Daily average	501,967	535,429	903,860	103,182	34,908	63,607	90,863	117,581	2,343,268
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January:	Month	15,532,141	13,664,149	26,409,838	3,170,587	1,101,616	1,792,398	2,444,164	3,566,000	67,680,893
	Daily average	501,037	440,779	851,930	102,277	35,536	57,819	78,844	115,032	2,183,255
February:	Month	14,616,862	11,806,190	23,858,375	2,828,839	1,008,562	1,617,087	2,420,224	3,294,000	61,460,139
	Daily average	504,030	407,110	822,703	97,891	34,778	55,762	83,456	113,586	2,119,315
March:	Month	15,575,915	12,998,796	26,163,647	3,042,929	1,082,897	1,703,145	2,617,392	3,553,000	66,716,721
	Daily average	502,449	419,316	843,956	98,159	34,287	54,942	84,432	114,613	2,152,153
April:	Month	15,524,444	12,718,029	26,362,851	2,974,080	1,048,620	1,868,957	2,525,040	3,684,000	66,696,012
	Daily average	517,481	423,934	878,762	99,136	34,954	61,965	84,168	122,800	2,223,200
May:	Month	15,576,741	13,169,420	27,328,472	3,038,930	1,064,602	2,012,701	2,600,683	3,809,000	68,599,549
	Daily average	502,443	424,820	881,564	98,030	34,342	64,926	83,893	122,871	2,212,889
June:	Month	14,118,970	12,757,230	26,161,092	2,837,179	1,022,970	1,957,433	2,416,630	3,699,000	64,870,554
	Daily average	455,451	425,241	872,036	94,573	34,099	61,914	80,554	123,300	2,162,352
Total 12 months		184,097,656	156,976,966	338,725,214	36,788,107	13,286,038	21,428,928	31,819,211	42,929,000	826,053,120